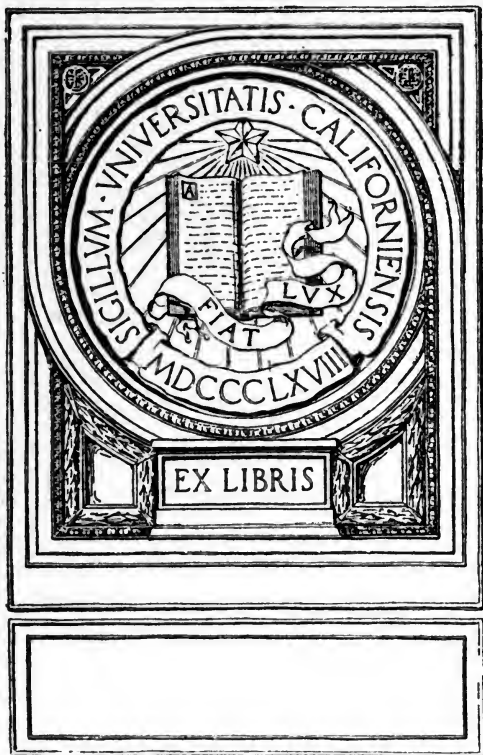


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THE
A B C
OF
THE FOREIGN EXCHANGES



SUPPLY.

LONDON.

Dr.

Bills are drawn on London

against

The greater the supply
the more the exchange
is against us.

Trade Influences.

Exports
of produce.

Securities

sold in London
for foreign account,
or
bought abroad for
London account.

Loans

to foreign govern-
ments, railways,
companies, &c.

Stock
Exchange
Influences.

Credits

Documentary—Blank—Travellers'
—
Merchants,
Bankers,
Exporters.

Arbitrage

and
speculative
transactions.

Banking
Influences.

LONDON.

Cr.

DEMAND.

Bills are wanted on London

for

The greater the demand
the more the exchange
is for us.

Imports
of manufactured
goods

Freight;
also
Commissions,
Brokerages,
&c.

Securities

bought in London
for foreign account,
or
sold abroad for
London account.

Interest

on Loans,
and dividends
on foreign
securities
held here.

Trade
Influences.

Stock
Exchange
Influences.

Credits

(to cover drafts previously
issued against docu-
mentary and blank
credits).

Arbitrage

and
speculative
transactions.

Banking
Influences.

Investment

11220-95

THE
A B C
OF
THE FOREIGN EXCHANGES
A PRACTICAL GUIDE

BY
GEORGE CLARE
AUTHOR OF "A MONEY-MARKET PRIMER"



London
MACMILLAN AND CO.
AND NEW YORK
1893

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PREFACE

THE substance is here reproduced of a short course of lectures on the Foreign Exchanges, which the writer was invited to deliver in the early part of the current year before the members of the Institute of Bankers, and which were afterwards published in the Journal of the Institute. To justify their reappearance in book-form a few words of explanation appear necessary. It is manifest, in view of the able and exhaustive treatment that the abstract theory has received in the well-known treatise by Mr. Goschen, and in other standard works, that it would tend to no useful purpose to serve up a mere *réchauffé* of those general principles which are already familiar to all educated men; and that simply to say over again what has been much better said before would be only trifling with the reader. More than this is required, and more has been attempted.

The difficulties inherent to the study of the exchanges (and that there are difficulties will scarcely be

denied) are ascribable, not to failure to grasp the import of the few simple propositions that form the basis of the science, but to the perplexity attendant on the application of abstract principles to the solution of problems encountered in the merchant's every-day experience. What the man of business wants is a theory so stated and so illustrated as to be capable of being easily adapted to actual use—a theory which, by enabling him to understand why a particular rate has risen or fallen in the past, may help him to judge for himself whether it is likely to rise or to fall in the immediate future.

Bearing these requirements in mind, the writer (who has gained his experience at first-hand) has endeavoured to render his exposition as practical as possible, and, at the risk of overburdening it with technicalities, has illustrated each successive step by reference to actual transactions and by numerous instances derived from the course of the exchanges. As he writes, too, for busy men, he has also aimed at plain directness of statement, in order that he who runs may read, and, reading, understand.

LONDON, *December*, 1892.

LIST OF CONTENTS

I

	PAGE
INTRODUCTORY	1
What are the Foreign Exchanges ?—Our foreign trade.—Barter. —Instance of a barter.—The use of money.—Bills of Ex- change.	

II

THE THEORY OF THE EXCHANGES	6
How the settlement is effected when the transactions balance.— And how it is effected when the amount to be received exceeds or falls short of the amount to be paid.	

III

ENGLAND DRAWS FEW BILLS, BUT ACCEPTS MANY.—THE REASON AND THE RESULT	11
If two countries buy of each other, only one of them need draw. —Why London has become the world's settling-place.— The foreign exporter would rather draw on London than have us remit ;—And the foreign importer would rather buy a remittance than accept a draft.—It suits us very well to fall in with this arrangement, and consequently our foreign trade is settled almost entirely by means of bills on London.—The rate of exchange between any two coun- tries is fixed by the one that draws the bill ;—Hence, the exchanges on London are controlled from the other side ; —And the foreign trader naturally watches their fluctua- tions with greater interest than the British trader.	

IV

	PAGE
THE PAR OF EXCHANGE	16

Meaning of par.—The ideal par is an indeterminate quantity ;
—But a Mint Par is fixed and invariable.—What Mint
Par means, and how it is arrived at.—The French, German,
and American pars.—Why the principal pars are of im-
portance to business men.—The legal relationship of dif-
ferent currencies is not necessarily their actual relationship.

V

BETWEEN A GOLD-STANDARD COUNTRY AND A SILVER-STAND- ARD COUNTRY THERE EXISTS NO FIXED PAR OF EX- CHANGE	22
---	----

The weight and fineness of the English shilling compared with
that of the Indian rupee.—What the Coinage Act says
about gold, and what it does not say about silver.—Bar
gold can be turned into money by taking it to the Mint ;
—But silver can only be turned into money by selling it.
—Hence, foreign silver coins are worth not their weight
in shillings, but only what they will fetch.—Why the gold
coin of India does not serve to establish a fixed par with
the sovereign.—How the par is established with a double-
standard country.

VI

THE RISE AND FALL OF THE EXCHANGE	27
---	----

If the demand for bills on London exceeds the supply the price
rises.—The point at which other means of remittance be-
come available is the extreme limit of the rise ;—But the
limit for the time being is the rate that bankers will draw
at, and this depends ultimately on the cost of covering
their drafts.—Why allied exchanges rise together and fall
together.—A fall of the exchange.

VII

GOLD POINTS	34
The marketability of gold.—Definition of gold-point.—It is not possible to fix a gold-point with exactitude.	

VIII

THE LONDON COURSE OF EXCHANGE	37
---	----

All exchange business is transacted in London.—The Royal
Exchange.—Dealings in bills.—The Course of Exchange.—
The double quotation.—Other capitals quote bills in the

home currency, but London quotes some in sterling and some in foreign money.—Advantages of the practice.—Its drawback.—Some exceptions to the rule of quoting here as they quote abroad.—Anomalies in the list of places.—The great fault of a London Course of Exchange.—How bills are quoted in Vienna and Frankfort.—A suggested improvement.

IX

THE TERMINOLOGY OF THE EXCHANGES 50

Unless care be exercised, the technical language of the exchanges may prove misleading.—Significance of “rise” and “fall,” “high” and “low,” when applied to rates expressed in foreign money.—“Premium” and “discount.”—“For us” and “against us.”—“Favourable” and “unfavourable.”—What business men mean when they describe a rate of exchange as favourable.—A useful rule of thumb.

X

THE ARITHMETIC OF THE EXCHANGES 55

Conversion of foreign money into sterling and *vice versa*.—Premium and discount.—Chain Rule.—Interest calculations.—“Tel quel” rates; what they are, and how to construct them.

XI

FOREIGN BILLS IN THE HOME CURRENCY. 64

A peculiar custom.—Advantage of drawing in sterling.—Why the exchange is fixed in London.—If a sterling bill has less than three months to run, how should it be endorsed?

XII

THE LONG EXCHANGE 69

What is the long exchange?—Interest.—Bill-stamp.—The question of credit.—Why interest is taken at the foreign rate.—The allowance for interest varies with the class of paper, because the discount-charge on the other side also varies.—Long and short rates from the foreign standpoint.—Arbitrage business and its influence on rates.—A practical illustration.—The sight-exchange between two countries cannot be rising on one side while falling on the other.

XIII

FLUCTUATIONS OF THE EXCHANGES 77

Why people pay more, or take less, for a bill than its face-value.—The rate is affected only by those transactions

which have to be settled.—The supply of bills on London *versus* the demand.—The influence on the exchange of ordinary trade.—Of Stock Exchange business.—Of foreign loans, and the interest on them.—Of mercantile credits.—Of travellers' credits.—Of blank credits.—Of arbitrage and speculative transactions.

XIV

THE CONTINENTAL INVESTMENT-DEMAND FOR LONDON PAPER 88

The functions of a banker.—Distinctive qualifications of a banking security.—Bills of exchange as investments.—Continental bankers buy those that yield the best return.—If the London market-rate rises above the Continental level, bills on London are sought after abroad and the price rises.—The lower the price the sooner it is affected by a difference in discount-rates.—There is no necessary ratio between an advance of the discount-rate and a consequent advance of the sight-exchange.

XV

THE CONTINENTAL INVESTMENT-DEMAND FOR LONDON PAPER
(continued) 93

Owing to the want of necessary data it is in most cases impossible to ascertain the specific cause of exchange-movements.—But in the case of the investment-demand cause and effect are intimately associated.—A comparison between the movements of the principal short exchanges in 1890, and those of the respective discount-differences.—How the principle is illustrated by the usage of sending "Firsts for Acceptance" to London.—Without good credit there can be no investment-demand.—How and why a ten-per-cent. Bank Rate in 1866 sent the French exchange down instead of up.

XVI

THE CONTINENTAL INVESTMENT-DEMAND FOR LONDON PAPER
(continued) 100

How and why a reduction of the discount-margin immediately sends the Continental exchanges down.

XVII

THE MONEY-MARKET AND THE GOLD-EXCHANGES 104

The Coinage Act 1870.—An engagement to pay money is an engagement to pay gold.—To bankers, who are under engagement to pay large sums at short notice, this fact is all-important.—All the clearing-bankers keep an account

at the Bank of England.—A demand for gold, in whatever part of the country it may spring up, must fall on the Bank of England.—The amount of gold in circulation varies with the state of trade.—And the amount of notes with the state of credit.—Why other countries send to London for gold, and what they want it for.

XVIII

THE MONEY-MARKET AND THE GOLD-EXCHANGES (*continued*) . 111

The effect of every efflux of gold is to reduce the Reserve.—Why a withdrawal of gold from the Issue Department diminishes the stock of notes held by the Banking Department.—A rise of Bank-rate pulls up the deposit-rate, and a rise of the deposit-rate pulls up market-rate.

XIX

THE MONEY-MARKET AND THE GOLD-EXCHANGES (*continued*) . 116

As the market has ample warning of the gold-shipments due to unfavourable exchanges, it is usually prepared for them.—The New York exchange in October, 1891, and the influence of its fluctuations on the London market-rate.—Why an advance of the discount-rate checks an outflow of gold.

XX

THE MONEY-MARKET AND THE GOLD-EXCHANGES (*continued*) . 121

How a bill-broker is affected by a rise of bank-rate.—Shipments of gold for special purposes cannot be foreseen.—The normal condition of most of the exchanges is favourable to England.—Favourable exchanges do not necessarily bring gold.—Where our gold imports come from.

XXI

THE PARIS EXCHANGE 126

Par and gold-points.—The upper gold-point is only nominal.—Effect of the double standard.—The Bank of France and the gold premium.—Limit to the rise of the exchange.—The Paris Course of Exchange explained.

XXII

THE BERLIN EXCHANGE 131

Par and gold-points.—How the Reichsbank encourages imports of gold ;—And how it hinders exports.—The Berlin Course of Exchange.

	PAGE
XXIII	
THE NEW YORK EXCHANGE	134
<p>Par and gold points.—Is subject to fewer and less complex influences than the Continental rates.—In the autumn is usually against this country, but favours us during the rest of the year.—The fluctuations in 1891.</p>	
XXIV	
THE SILVER EXCHANGES	139
<p>The Indian currency system before and after 1835.—Value of the rupee.—The rate is always against us.—An easy way of finding the sight-exchange from the price of silver.—India Council Drafts.—The exchanges with China and Mexico.—The Mexican Dollar.</p>	
XXV	
THE PAPER EXCHANGES	143
<p>Paper money is in almost universal use.—Even if inconvertible, can be kept from depreciation if proper precautions are taken.—Cannot be exported.—Gold is dealt in like ordinary merchandise, and always stands at a premium.—The essential conditions of a sound system of paper-currency are elasticity and self-adjustment.—Inconvertible paper fulfils neither condition.—An over-issue may be accidental ;—But is usually wilful.—Inflation and its result.—A recent instance.</p>	
XXVI	
THE PAPER EXCHANGES (<i>continued</i>)	150
<p>The ordinary theory of fluctuations appears to need modification in the case of paper exchanges.—The simplest plan is to regard every rise or fall as due to a change in the demand and supply of the national currency.—What governs the value of the paper unit.—Depreciation has no limit.—The effect of depreciation on trade.—The evil consists not in the extent of the depreciation, but in the violence of the fluctuations.—The classes that suffer most from it.—An unfavourable exchange tends to work its own cure.</p>	
XXVII	
THE PAPER EXCHANGES (<i>continued</i>)	156
<p>Course of the Brazilian exchange from 1888 to 1891.—Why it fell after the Revolution.—The Italian exchange.—Causes of the rise.—The Spanish rate.—The Russian rate.—Value of the silver rouble.—Effect of the Crimean and Russo-Turkish Wars on the value of the paper-rouble.</p>	

LIST OF DIAGRAMS

	PAGE
1 THE DIFFERENCE BETWEEN THE MARKET-RATES OF DISCOUNT IN LONDON AND PARIS IN 1890 COMPARED WITH THE PRICE IN PARIS OF CHEQUES ON LONDON . .	95
2 THE DIFFERENCE BETWEEN THE MARKET-RATES OF DISCOUNT IN LONDON AND BERLIN IN 1890 COMPARED WITH THE SHORT EXCHANGE ON LONDON IN BERLIN . .	95
3 THE DIFFERENCE BETWEEN THE MARKET-RATES OF DISCOUNT IN LONDON AND PARIS IN 1866 COMPARED WITH THE SHORT EXCHANGE ON LONDON IN PARIS	97
4 THE COURSE OF THE EXCHANGE IN NEW YORK IN 1891 FOR CABLE-TRANSFERS ON LONDON	136
5 THE COURSE OF THE EXCHANGE IN RIO DE JANEIRO IN 1888-1891 FOR THREE-MONTHS BILLS ON LONDON	156
6 THE COURSE OF THE EXCHANGE IN LONDON IN 1891 FOR THREE-MONTHS BILLS ON ITALY	157
7 THE COURSE OF THE EXCHANGE IN LONDON IN 1891 FOR THREE-MONTHS BILLS ON SPAIN	158
8 THE COURSE OF THE EXCHANGE IN LONDON IN 1891 FOR THREE-MONTHS BILLS ON PETERSBURG	159



THE A B C OF THE FOREIGN EXCHANGES.

I

INTRODUCTORY

What are the Foreign Exchanges?—Our foreign trade.—Barter.—Instance of a barter.—The use of money.—Bills of Exchange.

LIKE many other of the cumbrous and archaic pieces of jargon that enter into the language of commerce, the term “Foreign Exchanges,” taken by itself, is so vague as to convey scarcely any definite image to the mind of those to whom use has not rendered it familiar. In expositions of the theory it is usually described as an explanation of the means by which the mutual indebtedness of nations is paid off and cancelled:—

“The system by which commercial nations discharge their debts to each other.”—*Ency. Brit.*

or, in a narrower sense, of the principles on which foreign bills of exchange are created and dealt in, and

on which their price is fixed; but in actual practice we almost invariably find it employed with the signification of rates of exchange:—

“The foreign exchanges are moving against us.”—*Economist*, 9th April, 1892.

“Bills were in small supply, and the tendency of the exchanges was against this country.”—*Times*, 8th April, 1892.

In America the ambiguity goes even further, “exchange” there being an expression that commonly passes current for “bills of exchange”:—

“The National Park Bank buy and sell foreign exchange.”—Advertisement in *New York Chronicle*, 9th April, 1892.

The great basis of international indebtedness is foreign trade; and the foreign trade of this country, in the settlement of which the foreign exchanges come into play, is on a scale of great magnitude. For the year 1891 our imports and exports amounted together to 682,000,000*l.*, and it may be taken for granted that the whole, or practically the whole, of these vast transactions were settled by means of bills of exchange.¹ Our imports are principally articles of food and raw materials. We have to obtain from abroad those commodities which we cannot ourselves produce, such as tea, coffee, sugar, &c.; those again of which we cannot raise sufficient for our needs, such as wheat, wool, &c.,

¹ Telegraphic transfers, which are now largely used for effecting payments between distant countries, may be regarded as bills of exchange drawn at sight.

and, lastly, those commodities and manufactures which we can only produce at a disproportionate cost. On the other hand, we send away manufactured goods, and such commodities as we are best fitted to produce.

Commerce, says McCulloch, is simply, as its name imports, “the exchange of commodities for commodities.” Each country keeps, so to say, a trading account with the rest of the world—an account which it debits with what it gives and credits with what it receives. The debits act as a set-off against the credits, and only the balance is left for settlement in money. As regards our own foreign trade, the United Kingdom every year receives considerably more than it gives, but the difference, as will afterwards be seen, arises partly out of transactions of a financial nature, and is partly a return for services rendered, so that it does not necessarily fall to be paid for.

In a more primitive state of society, before the use of money became general, commodities must, to a great extent, have changed hands by way of actual barter, and of one such transaction, that occurred about 3000 years ago, we happen to possess a very exact record. It relates to the building of Solomon’s Temple. Being in want of timber, Solomon writes to a neighbouring monarch, asking the latter to supply him with cedar and fir, and offers in return to send wheat and oil. The reply comes as follows:—

“And Hiram sent to Solomon, saying, I have considered the things which thou sentest to me for: and I

will do all thy desire concerning timber of cedar, and concerning timber of fir. My servants shall bring them down from Lebanon unto the sea: and I will convey them by sea in floats unto the place that thou shalt appoint me, and will cause them to be discharged there, and thou shalt receive them: and thou shalt accomplish my desire in giving food for my household. So Hiram gave Solomon cedar trees and fir trees according to all his desire. And Solomon gave Hiram twenty thousand measures of wheat for food to his household, and twenty measures of pure oil: thus gave Solomon to Hiram year by year.”¹

As there was no question here of a balance either one way or the other, this was a case of barter pure and simple; and though we no longer transact business in this regal fashion, yet the result, that of an exchange of commodities, is precisely the same, the only difference being that we now transmute all values into terms of money, and, if there should be a balance over, insist on payment of it.

The chief function of money, political economists tell us, is to serve as a medium of exchange. It is a “common denominator” of all things that have an exchangeable value. We were taught at school to compare the values of different fractions by reducing them to a common denominator, and, in the same way, if we wish to compare the value of the labour embodied in a sack of wheat with that embodied in a sack

¹ 1 Kings, v. 8—11.

of coal, we inquire the respective prices, which are an expression of that value in the common terms of money.

Instead, however, of settling our foreign bargains in actual coin, in which case every separate export or import of goods would need to be followed by a corresponding import or export of precious metal to pay for it, we simplify matters by employing paper counters, or bills of exchange, the use of which is illustrated by the familiar theory of the foreign exchanges.

II

THE THEORY OF THE EXCHANGES

How the settlement is effected when the transactions balance,—And
 . how it is effected when the amount to be received exceeds or falls
 short of the amount to be paid.

IF we take any two countries that trade together, such as the United States and the United Kingdom, and assume that each buys of the other commodities of precisely the same value, which we may put at 10 *x*, thus :—

UNITED STATES.		UNITED KINGDOM.	
A.	B.	C.	D.
<i>Dr.</i> To Piece Goods, &c., bought from the United Kingdom, value 10 <i>x</i> .	<i>Cr.</i> By Wheat, &c., sold to the United Kingdom, value 10 <i>x</i> .	<i>Dr.</i> To Wheat, &c., bought from the United States, value 10 <i>x</i> .	<i>Cr.</i> By Piece Goods, &c., sold to the United States, value 10 <i>x</i> .

it is evident that, as the matter stands, the importer A in the United States must remit 10 units of gold to D

in the United Kingdom, and that C in the United Kingdom must remit 10 units to B in the United States, so that the money will have to travel half way across the world and back again.

Now, says the theory, seeing that A and C have each to pay 10 x , and that B and D have each to receive that amount, why not save the trouble and expense of this useless journey by arranging that A should pay the money to his neighbour B for C's account, and that C should pay his neighbour D for A's account? It can be very simply done. Let B write out an order, or bill of exchange, instructing C to pay D, let A give B 10 x for the bill and remit it to D, and let D present it to, and get his money from, C. The whole settlement will then be effected by means of the one bill and without the transmission of a single coin, thus:—

UNITED STATES.		UNITED KINGDOM.	
A.	B.	C.	D.
Importers of British Goods.	Exporters of American Goods.	Importers of American Goods.	Exporters of British Goods.
A buys the draft and remits it to D.	B draws on C.	C pays it.	D presents it.

Exactly the same result would have been arrived at if, instead of B drawing on C, D had drawn on A :—

D draws on A,
C buys the draft and remits it to B,
B presents it,
A pays it ;

but it is clear that if D draws on A, as well as B on C, they would both find it difficult (and without the intervention of a third party—the foreign banker—impossible) to dispose of their bills to advantage, inasmuch as the importer in both countries, who is the natural buyer of the paper created by exporters, would according to the hypothesis pay for the goods he had purchased by giving his acceptance, and would therefore have no occasion to buy a remittance.

So far, it has been taken for granted that, while the whole of the sellers on the other side prefer to draw on London, the whole of the sellers on this prefer their customers to remit ; but, as such unanimity of arrangement does not prevail in practice, let us put the case in which, though the majority of the bills originate abroad, as is actually the fact, a certain proportion, say 10 per cent., are drawn from the United Kingdom. The theory still holds good, but the application of it has to be modified, as follows :—

UNITED STATES.		UNITED KINGDOM.	
A.	B.	C.	D.
Importers of British Goods.	Exporters of American Goods.	Importers of American Goods.	Exporters of British Goods.
A buys 9 x from B and remits it to D.	B draws 9 x on C.	C buys 1 x from D and remits it to B.	D draws 1 x on A.
A pays D's draft for 1 x to B.	B receives 1 x from C.	C pays B's draft for 9 x to D.	D receives 9 x from A.

The effect of drawing from this side, it is seen, is simply to diminish the amount that would otherwise be drawn from the other.

Lastly, we have to ask how the mutual indebtedness is cancelled in the event of the amount to be received by the one side exceeding what it has to pay. Say we are creditors for 10 x , as before, but only owe 9 x (see Table on following page).

As A can only find bills to the amount of 9 x in the market, he must necessarily send the balance of 1 x in gold. The result would be the same if D drew on him, for as the buyer of the draft could not, according to the conditions, be indebted to the United States, this would be merely substituting one creditor on this side for another.

UNITED STATES.		UNITED KINGDOM.	
A.	B.	C.	D.
<i>Dr.</i> Importers 10 <i>x</i> .	<i>Cr.</i> Exporters 9 <i>x</i>	<i>Dr.</i> Importers 9 <i>x</i> .	<i>Cr.</i> Exporters 10 <i>x</i> .
A buys 9 <i>x</i> from B and remits it to D.	B draws 9 <i>x</i> on C.	C pays B's draft for 9 <i>x</i> to D.	D receives 9 <i>x</i> from A. D receives 1 <i>x</i> in gold from A.
A remits 1 <i>x</i> in gold to D.			

III

ENGLAND DRAWS FEW BILLS, BUT ACCEPTS MANY.—THE REASON AND THE RESULT

If two countries buy of each other, only one of them need draw.—Why London has become the world's settling-place.—The foreign exporter would rather draw on London than have us remit ;—And the foreign importer would rather buy a remittance than accept a draft.—It suits us very well to fall in with this arrangement, and consequently our foreign trade is settled almost entirely by means of bills on London.—The rate of exchange between any two countries is fixed by the one that draws the bill ;—Hence, the exchanges on London are controlled from the other side ;—And the foreign trader naturally watches their fluctuations with greater interest than the British trader.

It has been shown that, if two countries buy of each other to the same amount, their transactions need not give rise to two separate sets of bills, but that on the contrary, if the foreigner draws on us to the full value of his exports, the bills so created will be sent as remittances to the exporter on this side and will pay him for his sales. Conversely, if the British exporter draws, there is no necessity for the other side to do so.

What then are the facts ? Does the United Kingdom, generally speaking, draw on abroad, or does the foreigner take the initiative by drawing on London ?

As a matter of fact, both sides draw ; but, as all who are acquainted with the customs of trade are well aware, the bills drawn by Great Britain on abroad are vastly outnumbered by those drawn from abroad on London.

Owing chiefly to the magnitude of our trade, but also to several contributory causes—such as the stability of our currency ; the certainty that a bill on London means gold and nothing but gold ; the facility with which those who deserve credit can obtain it here ; our freedom from invasion, or any chance of invasion, &c.—London has become to a great extent the settling-place of Europe and the world, and the seller, wherever he may be, of a good bill on London can always be sure of finding a buyer and of realizing a fair price. As the sale of a bill, moreover, carries the valuable advantage of ready money and a speedy turnover of capital, it is invariably preferred by the foreign exporter, who has consigned or sold produce to us, to the alternative plan of awaiting remittances from this side. The foreign importer, too, who has to pay for the goods he has bought, would rather do so by remitting to London than by allowing us to draw upon him. In the former case, the rate he has to pay depends on his own success in higgling ; in the latter, it is fixed by a London bill-broker, who has not the same interest in the matter.

If the same considerations held good on this side also, our merchants and manufacturers might perhaps object to letting the foreigner have it all his own way ;

but, on the contrary, it appears to suit both buyers and sellers very well—the former, because in the majority of cases they would scarcely know how or where to buy suitable bills, and the latter, because the drawing and negotiation of a foreign bill requires a certain amount of knowledge of the exchanges, which they do not always possess, and entails a certain amount of trouble, which they would gladly be spared. There is also more risk of loss in drawing. In the latter case they have only their correspondent to look to, while on a London remittance they have the additional security of the other parties to the bill.

Practically speaking, therefore, the settlement of our foreign trade is effected by means of bills of exchange which are drawn and negotiated abroad, and are accepted and paid in London.

To the student of the exchanges this fact is of considerable importance, for, as the rate of exchange between two countries—the price at which bills on the one are sold in the other—must be *fixed by the one that draws and negotiates the bill*, it follows that the exchanges between England and most other countries are controlled from the other side, and that we in London have scarcely part or say in the matter. The rate of exchange, for example, between England and the United States is fixed in New York; between England and Brazil, in Rio; between England and Turkey, in Constantinople; and so on. There may be exceptions, of which the Indian exchange is the most notable, but

that is the general rule, and it is one that should be carefully borne in mind.

The same fact also supplies a reason for the solicitude with which the foreign trader watches the fluctuations of the exchange, and for the utter indifference with which they are regarded by the British trader. To the former, who intends maybe to draw a few hundred pounds on London in a day or two against the shipment he is preparing, the difference between selling his draft next week instead of this may mean, if the rate should move in his favour, the gain of an additional half per cent. ; but to our home manufacturers, who sell their wares in sterling and stipulate for payment in bills on London, the see-saw of rates is but of academic interest. They pay attention to the course of discount, because they may have to melt some of their paper before pay-day comes round ; but the course of the exchange—the question of the rate rising or falling—hardly concerns them at all.¹

It is not sought to detract from the influence of the English-drawn foreign bill, or, as might be imagined, to explain it away altogether. On the contrary, paper to a considerable amount is, and will continue to be, negotiated on the Royal Exchange (though the total, if compared with that of the paper on London negotiated abroad, would appear quite insignificant). The object

¹ *Indirectly*, as the Lancashire manufacturers have found to their cost in the case of the silver exchanges, some of the rate-fluctuations may concern them a great deal ; but that is quite another matter.

in view is merely to bring into prominence, and to impress on the reader, the essential principle that, while the position of every rate of exchange is the outcome of the market conditions *in the two countries combined*, the predominant mass of the dealings take place on the other side, so that, as a consequence, the real significance of the fluctuations can only be grasped by viewing them from the foreign standpoint.

IV

THE PAR OF EXCHANGE

Meaning of par.—The ideal par is an indeterminate quantity ;—But a Mint Par is fixed and invariable.—What Mint Par means, and how it is arrived at.—The French, German and American pars.—Why the principal pars are of importance to business men.—The legal relationship of different currencies is not necessarily their actual relationship.

THE definition of the word “par,” as given in the Dictionary, is a “state of equality.” Two things are on a par with each other when the one is just as good as the other, and there is nothing to choose between them. Consequently, an exchange has been conducted at par when that which was given is on a par with, or equal to, that which was received. There must be neither profit nor loss on the transaction, and neither party to it must gain any advantage at the expense of the other.

A favourite illustration, and the one commonly met with, is the exchange with Australia, which is selected because it saves the necessity of comparing two different systems of currency. If there were no debts owing on either side, we are told, and if England and Australia

each bought of the other commodities of precisely the same value, their accounts with each other would just balance, the demand for bills would exactly equal the supply, 100%. in either country would purchase a draft for precisely 100%. on the other, and the exchange would be at par.

This is no more than an assumption, however. As there are no possible means of knowing when the demand for bills exactly equals the supply, it cannot be proved, but is only supposed, that under such circumstances the exchange would stand at par.

Then again, even if the Australian were charged exactly 100%. for a cheque of that amount on London, is it absolutely correct to say that the exchange has been conducted at par? Par implies equivalence; and the question is, whether the title which the Australian has acquired to a hundred sovereigns lying on the other side of the earth is really equivalent to the hundred sovereigns that he has just parted with. If interest is to be admitted into the calculation—and there seems to be no valid reason why it should not—obviously the exchange has not been effected at par, inasmuch as five or six weeks must elapse before he can claim and make use of the money: and until he obtains it he is losing interest on the hundred pounds that he paid away. Practically, however, it matters nothing which way we take it; and the question is only raised to show that opinions may differ as to what constitutes the actual equivalence demanded by an ideal par.

That to which exchange-dealers and cambists give the name of par, is something much more matter-of-fact and comprehensible. Their par of exchange, distinguished as the mint-par, (is the fixed intrinsic value of the currency-unit of one country, expressed in terms of the currency of another, [which uses the same metal] as a standard of value.) The value of a currency unit is taken to depend on the quantity of pure metal that it contains, *as fixed by law*; and the mint-par tells us how much of the other country's currency contains, *according to their law*, precisely the identical quantity of the same pure metal. It therefore means value for value in fine gold between gold-using countries, and value for value in fine silver between silver-using countries.

A comparison between the currency-units of England and France will illustrate the principle. As to the former—the English sovereign—it was provided by the Act 56, Geo. III., cap. 68 (22nd June, 1816), that the gold coin of this realm should hold such weight and fineness as were prescribed in the then existing Mint indenture,¹ that is to say, that there should be nine

¹ The actual wording of the ancient Mint indenture referred to is:—
 “Every pound weight troy of all the monies of gold aforesaid shall be in value forty-six pounds, fourteen shillings and sixpence, and shall be in fineness at the trial of the same twenty-two carats of fine gold and two carats of alloy in the pound weight troy, which standard aforesaid of twenty-two carats of fine gold and two carats of alloy in every pound weight troy our Sovereign lord the King doth will and ordain and establish by these presents to be the right standard of crown gold.”
 Until 1816, guineas were the principal gold coin of the country, and £46 14s. 6d. really means 44½ guineas. Twenty pounds troy of standard

hundred and thirty-four sovereigns and one ten shilling piece contained in twenty pounds weight troy of standard gold, of the fineness at the trial of the same of twenty-two carats fine gold and two carats of alloy in the pound weight troy. An ounce troy of standard gold is therefore coined into $3\frac{4}{7}\frac{2}{9}$ sovereigns, which amount, expressed in terms of the currency, is 3*l.* 17*s.* 10½*d.*, and this in common language is called the price of an ounce of gold. In other words, an ounce of standard gold and 3*l.* 17*s.* 10½*d.* are synonymous and interchangeable terms.

In the first schedule to the Coinage Act, 1870, the *metric* weights of all our coins are given, which is a great convenience when we have to compare them with foreign ones. That of the sovereign is 7·98805 grammes (rather over 123½ grains), and as the law which regulates the French monetary system¹ requires that 155 twenty-franc pieces shall be coined from one

gold are now coined into 934½ sovereigns, equal to 890 guineas, thus preserving the former proportion between the weight and value of the coin.

¹ The monetary unit of France is the silver franc, weighing five grammes, nine-tenths fine :—“Cinq grammes d’argent, au titre de neuf dixièmes de fin, constituent l’unité monétaire, qui conserve le nom de franc” ; but the provisions of the law as to gold give it a legal currency and value, independent of its relation to silver.

Loi du 7 Germinal, an XI. (1803) :—

Art. VI. Il sera fabriqué des pièces d’or de vingt francs

„ VII. Leur titre est fixé à neuf dixièmes de fin, et un dixième d’alliage.

„ VIII. Les pièces de vingt francs seront à la taille de cent cinquante-cinq pièces au kilogramme

kilogramme of gold, nine tenths fine, we are now in a position to ascertain what ratio the sovereign bears to the franc.

Asking, by Chain Rule, how many francs are equal to a sovereign, if

$$\begin{aligned}\text{£1} &= 7.988 \text{ grammes standard,} \\ 12 &= 11 \text{ grammes fine,} \\ 900 &= 3100 \text{ francs ;}\end{aligned}$$

we obtain the result,

$$\frac{7.988 \times 11 \times 3100}{12 \times 900} = 25.2215$$

Again, according to German mint-law, 500 grammes fine gold are to be coined into $69\frac{3}{4}$ twenty-mark pieces, nine-tenths fine, which gives a ratio to the sovereign of,

$$\begin{aligned}\text{£1} &= 7.988 \text{ grammes standard,} \\ 12 &= 11 \text{ grammes fine,} \\ 500 &= 1395 \text{ reichsmark ;} \\ &= 20.43 \text{ nearly.}\end{aligned}$$

Lastly, the United States coin a ten-dollar piece out of 258 grains gold, nine-tenths fine, making the sovereign worth :

$$\begin{aligned}\text{£1} &= 123.274 \text{ grains standard,} \\ 12 &= 11 \text{ grains fine,} \\ 232.2 &= 10 \text{ dollars} \\ &= 4.86\frac{2}{3}\end{aligned}$$

equivalent to $49\frac{5}{16}$ pence for one dollar.

These are the three most important pars ; and for ordinary business purposes are the only ones that need

be retained in the memory. Why they should be of importance to business men is due to the fact that the course of the chief gold exchanges frequently influences the course of the money market, and that we can only tell whether a rate is for us or against us by knowing the par, which is the centre about which it oscillates. It must be clearly understood, however, that a mint par only expresses the *legal* ratio. When we say that a sovereign is equal to f.25·22c., we mean that this amount of French currency expresses, according to French law, the same weight of gold as is contained in a sovereign, according to English law; but whether, if we were to put 2,000 ordinary sovereigns into one melting-pot and 2,522 ordinary napoleons into another, we should obtain two lumps of gold of exactly equal value, is another question. It would depend on the state of preservation in which the coins were. The sovereigns might be £10 short of the full weight, and still be within the legal allowance for wear; and so might the napoleons.

The mint-par depends, in short, not on the coin itself, but on the *legal definition* of it; not on the sovereign *de facto*, but on the sovereign *de jure*; and if every gold coin in this country were debased, and every gold coin in France sweated and mutilated, the mint par would still remain the same. Unless and until the law is altered the mint par cannot alter.

V

BETWEEN A GOLD-STANDARD COUNTRY AND A SILVER-STANDARD COUNTRY THERE EXISTS NO FIXED PAR OF EXCHANGE

The weight and fineness of the English shilling compared with that of the Indian rupee.—What the Coinage Act says about gold, and what it does not say about silver.—Bar gold can be turned into money by taking it to the Mint ;—But silver can only be turned into money by selling it.—Hence, foreign silver coins are worth not their weight in shillings, but only what they will fetch.—Why the gold coin of India does not serve to establish a fixed par with the sovereign.—How the par is established with a double-standard country.

SEEING that the ratio of value between the English gold-piece and the French gold-piece is arrived at by comparing the weight of fine metal which they respectively contain, let us now apply the same principle to silver, and, by comparing the substance of an English shilling with that of an Indian rupee, try whether we can ascertain the fixed par of exchange between England and India.

The weight and fineness of the shilling are determined by the same mint indenture to which we have already

referred, it being further prescribed therein, as regards silver-coin, that there shall be sixty-six shillings in every pound troy of standard silver of the fineness of eleven ounces two pennyweights of fine silver and eighteen pennyweights of alloy in every pound weight troy; that is to say, sixty-six shillings are to contain 5,760 grains of silver, $\frac{37}{40}$ fine, or 5,328 grains fine, and an ounce of coined silver is worth 5s. 6d. According to Indian Mint law the rupee must contain 165 grains fine silver, so that it should apparently be worth

$$\begin{array}{rcl} \text{R.1} & = & 165 \text{ grains fine silver} \\ 5328 & = & 66 \text{ shillings} \\ \hline & = & 2\text{s. } 0\frac{1}{2}\text{d. (nearly);} \end{array}$$

but as we very well know that it is not worth anything like 2s. there must be a flaw somewhere.

And yet, if by means of the fixed value given to standard gold through coining an ounce of it into 77s. 10½d., we are enabled to establish a par of exchange with other gold-using countries, why should not the fixed value given to standard silver, through coining an ounce of it into 5s. 6d., enable us to establish a par with silver-using countries?

The Coinage Act tells us why; or, at least, by putting together what the Coinage Act says about gold, and what it does not say about silver, we can infer why. In the first place, it says (Section 4) that, while gold coin is a legal tender to any amount, silver coin is legal tender only to the extent of forty shillings. Secondly,

it also says (Section 8) that, "Where any person brings to the Mint any *gold* bullion, such bullion shall be assayed and *coined*, and delivered out to such person, *without any charge* for such assay or coining, or for waste in coinage." According to law, therefore, anybody— whoever it may be—is entitled to take standard gold to the Mint, and to have it converted into sovereigns at the expense of the taxpayer.¹ Any foreign state, indeed, that may be in want of a cheap and good gold coinage, need but adopt the English sovereign² and send its bullion here, and our Deputy-Master of the Mint will do the work for it quite free of charge.

The Coinage Act does not contain a word, however, that can be construed into permission to take standard silver to the Mint, and to have it manufactured into shillings and half-crowns. That no one may do but the Government, which keeps the coinage of silver in its own hands as a monopoly, and by buying the bullion as cheaply as possible makes a considerable profit on the operation. Consequently, if you import silver, you cannot get it converted into the like weight of coin—as you can gold; and, even if you could, it would not be legal tender, except in dribblets. Being nothing more in fact than an article of merchandise, like copper or tin, the only way of turning silver into money is to sell it in the open market for what it will

¹ The expense of manufacturing our standard coin has been borne by the State ever since the year 1666, in the reign of Charles II.

² In Portugal, Brazil, and Egypt, the sovereign has circulated for many years past.

fetch; and the market-quotation has no more connection with the price charged for it by Government, after manufacture into coin, than it has with the price charged by Elkingtons, after manufacture into teaspoons and candlesticks. Hence, the 165 grains of fine silver contained in the rupee have no *fixed* value in sterling, but are worth $\frac{1.65}{4.44}$ of the constantly varying price of an ounce of standard silver: and we are thus led to the conclusion that, owing to the absence of a fixed relationship between the values of the two precious metals, there can exist no fixed par of exchange between a gold-standard country, like England, and a silver-standard country, like India.

Another question arises. As gold coins of a fixed weight and fineness circulate in India, why not establish a par by comparing the sovereign with the mohur,¹ which contains 165 grains fine gold? Why this cannot be done is because the mohur is not a legal tender, and has no fixed value. It is simply a gold medal, the existence and use of which are explained by the circumstance that, as a considerable amount of gold finds employment in India for various purposes, and, as any one taking it to the Mint may have it coined on payment of a small charge, it is sometimes convenient to have the weight and fineness certified in this manner, instead of each man having to weigh and assay for

¹ The mohur is a gold rupee. Its nominal value is fifteen silver rupees, representing an original ratio between silver and gold of 15 to 1.

himself. The mohur passes from hand to hand as a commodity, and, like the sovereign or any other gold coin, is bought and sold on the basis of the current market-price of gold.

One more case remains to be considered,—that of the so-called double-standard countries. In many states, of which the most prominent are France and the United States of America, the right exists on the part of the debtor to discharge his liabilities at his option in either of the two metals at a ratio fixed by law. Such countries are said to possess a double standard of value; but as none of them will give silver coin, weight for weight, in exchange for standard silver bullion, while all give gold coin in exchange for standard gold bullion, the latter metal alone is practically the real standard by which all values are measured.¹ For exchange purposes they may therefore all be classed as gold-standard countries, the par of exchange being established, as we have already seen in the case of France and the United States, through the medium of their gold coin.

¹ The mere possession of a double standard is not the same thing as bimetallism, an essential feature of which is the open mint, ready to coin any quantity of either gold or silver that may be brought to it.

VI

THE RISE AND FALL OF THE EXCHANGE

If the demand for bills on London exceeds the supply the price rises.—

The point at which other means of remittance become available is the extreme limit of the rise ;—But the limit for the time being is the rate that bankers will draw at, and this depends ultimately on the cost of covering their drafts.—Why allied exchanges rise together and fall together.—A fall of the exchange.

AS was already explained, whenever a Paris exporter is able to sell his draft on London at the exchange of 25.22 per £, theory bids us believe that the demand for remittances to this country must have chanced to tally with the amount on offer. No means exists of putting this assertion to the proof ; but, on the other hand, as no definite reason can be alleged why the mint par with Paris should not be identical with the ideal par, it is customary under such circumstances to assume—though solely on the ground that Fcs. 25.22 represent as much fine gold as 1*l.*—that demand and supply actually were equal.

But if they are admittedly unequal: what then ? What happens if more bills are wanted than are offered

for sale? Of course, the price rises. As buyers find themselves in the majority, and perceive that there are not sufficient remittances to go round, they bid against each other, and bills on London go to a premium. The market conditions may be such that sellers ask $\frac{1}{4}$ per cent. more for the pound sterling than its normal value, and unless the intending buyers can discover any cheaper mode of remitting they will have to pay it. But the advance in price cannot go beyond the point at which other means of remittance become available. It cannot, under ordinary conditions, go beyond 10 centimes per £, because that is about what it costs to send gold from Paris to London; and if the Bank of France, therefore, is willing to cash its notes in gold to any extent, the exchange on London will attain its maximum at par, plus 10 centimes, or at 25.32. An ordinary Londoner wanting to send a pound to Scotland would be affected by precisely the same considerations as influence the French importer. Like the latter, he wishes to send the money as cheaply as possible. If he encloses the sovereign itself in his letter, he must pay 2*d.*, or nearly 1 per cent., for "registering" it; but as he can obtain a Postal Order, which is nothing but a bill of exchange, for 1½*d.*, he gives it the preference; and the Frenchman gives preference to a bill if he can buy one at anything less three-eighths per cent. premium, which is what he must pay for carriage and insurance of specie.

Granting, then, that the price rises, let us suppose

that in the presence of a demand for remittances to the amount of 100,000*l.*, only 60,000*l.* are tendered for sale. Somebody, it appears likely, will have to go short; but are we to assume that those who cannot get bills will have to remit 40,000*l.* in gold, and that the competition of all these intending buyers will force the rate up to 25·32? Not at all. If the possibility of remitting were absolutely limited to the bills on the market, there would no doubt be a large and sudden advance; but the bidding need only be raised a centime or two to tap an almost inexhaustible source of supply—that of bankers' drafts. In other words, if the remitter cannot obtain a ready-made bill, he must pay a little more, and have one made to order. That a bank-draft should cost more than a trade-bill is (quite apart from the better standing of the drawer) only natural, for the banker, besides having to remunerate his correspondent, either by paying a trifling commission, or by keeping a balance in London free of interest, must also add on a certain percentage for the trouble of drawing and advising the bill, and of providing cover. The percentage will only be small, however, as the competition of other bankers will keep profits down to a minimum. Taking all things into consideration, say that he is willing to draw on London at 25·25,—if so, then 25·25 is the extreme price that the drawer of the trade-bill can hope to obtain, and in all probability he will have to take less.

The price that a bill will fetch in a rising market is limited, therefore, by the rate that bankers will sell at; and the rate that bankers will sell at is limited by competition amongst themselves. To get to the bottom of the matter, we have still to ascertain what the banker bases his price upon. After establishing his base, he adds perhaps one centime profit for himself, and another for his correspondent, but what does he add them to? A moment's consideration will show that he must add them to the *cost of covering his draft*, which is the first thing he takes into account. It may be that he holds a stock of London bills, having bought when the price was lower, or that he has accumulated a large balance over here; in that case the rise is all profit. But, if the demand continues, his portfolio and his balance will sooner or later be exhausted, and he must decide on some form of remittance. What he now does is to buy bills on some other country—on Belgium, or Italy, or Germany, for instance, whichever comes cheapest—to send them to his correspondents in those countries, and to request that they will remit for his account to London. This is a form of operation that involves double commission, etc., and that consequently can only be resorted to with advantage on a broad margin; but it is bound to come at last, and the result will be that the exchanges of other European countries that enjoy good credit will be set moving in the same direction as the London rate. The general

rule of European exchange movements is, that all rise together or all fall together, and if one of the rates fails to respond to the common tendency, it is usually because there is something wrong. Thus, if the value of the Italian or Spanish currency-unit is falling, when that of the French, Belgian, and Swiss franc is rising, it may be taken for granted that there is a screw loose in Italian or Spanish finances.

So long, accordingly, as suitable bills on other countries can be had in quantity in the Paris market, the rise in the London rate will be held in check; but in proportion as they become scarcer, the price must go higher and higher, until finally the banker finds that, instead of buying bills on Berlin or Antwerp, and paying the extra commission and bill-stamp, it will come cheaper to cover his London agent by drawing gold from the Bank of France, and sending it across the Channel. Supposing, for example, that his Berlin correspondent charges him M.20.48 for each pound remitted to London, and that the price in Paris of a bill on Berlin for M.20.48 now amounts, when all expenses are allowed for, to Fcs.25.33; then each pound sent to London *viâ* Berlin will cost him Fcs.25.33. But against this the banker knows that the Bank of England will buy as much gold as he likes to offer at the fixed price of 77s. 10½d. per ounce standard, which works out equal to an exchange of 25.22; that is to say, if he sends to London 2,522 francs' worth of bullion, and pays all charges himself, he will get credit for £100.

The charges he estimates at 10 centimes per £; so that by laying out

Fcs.2522 on bar gold,
and 10 on carriage and insurance,
together Fcs.2532,

he receives credit in London for £100. Obviously, therefore, if other means of remittance cost more than 25.32 per £, he will resort to a gold-shipment, and, if gold can be had without difficulty, the London exchange will go no higher.

Once the circumstances of a rise are understood, those of a fall of the exchange present little difficulty. Slackening of demand or increase of supply are, of course, the reasons that account for a drop, and the extent of it will be limited by the anxiety of exchange dealers to pick up bargains; for, just as an advance of one or two points in the bidding for bills brings out fresh supplies, so a reduction of one or two points in the offers brings out fresh demands. If the fall should be continuous, it must almost inevitably force down the other exchanges, as bankers will sell drafts on those places which are quoted high, and will use their purchases of London paper as cover. In the end we arrive at the opposite extreme; that is to say, London paper becomes so cheap that the banker uses it to buy gold at the Bank of England, and, after paying the expense of conveyance to Paris, can earn a quick and safe profit by selling it to the Bank of

France at tariff price. Thus, if a bill on London for £100 can be bought as low as Fcs.2512

and if the expense of getting the gold over

can be cut down to	9
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then a hundred pounds' worth of gold deli-

vered in Paris will cost	Fcs.2521
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showing a profit of 1 centime in the £; and, as no restriction whatever is placed on the outflow of gold from London, the exchange can go no lower.

VII

GOLD POINTS

The marketability of gold.—Definition of gold-point.—It is not possible to fix a gold-point with exactitude.

OF the numerous commodities that are capable of being exported from one country to another, there is one, and one only, of which it may be said that, whatever state the markets are in, the owner is always sure of finding an immediate and safe buyer, and of selling at the same fixed price. Send diamonds, or silver, or securities, or produce to be realized at London, or at any other great commercial centre, and you will have to sell when you can, to whom you can, and as best you can ; but send gold, and the State itself (in all gold-standard countries) will not only buy it of you to any amount without delay or demur, but will pay for it at a price which, being established by law, is known beforehand and admits of no uncertainty. Hence it is that, when the settlement of international indebtedness cannot be completely effected by means of bills, the final balance is adjusted in gold.



By buying gold in one country and selling it in another, a certain rate of exchange is yielded, which is called a gold-point—the rate produced by buying at home and selling abroad being the export-point, and that produced by buying abroad and selling at home being the import-point. In both cases the charges that the operation entails must be either added to the price or deducted from the proceeds. A sovereign is composed of just as much fine gold—about $7\frac{1}{3}$ grammes—as is contained in 25.22 francs. If the Paris banker sends 732 grammes of gold to London, it will cost him 2522 francs, plus charges, and will realize £100; if he sends for it back again it will cost £100, and will realize 2522 francs, minus charges. Put the charges at 10 centimes per £, and we have 25.32 as the export gold-point from France to England, and 25.12 as the import gold-point into France from England.

The charges, it is to be observed, can only be estimated, as they vary with the magnitude of the operation, and according to the facilities possessed by those who undertake it. On a big shipment they might perhaps be cut down to 8 centimes per £, or even less; on a small one they would possibly run up to 11 or 12. Then again, some houses can get better terms for freight and insurance than others, and, in fact, are at all points in a more advantageous position for transacting the business. A gold-point, accordingly, cannot be stated as a definite figure; and though the French

import-point has been taken at 25.12, the metal would probably be sent over if the rate touched even 25.15, with a downward tendency.

It is of course obvious that, if the price of London paper rises to the export gold-point, it is immaterial to the remitter whether he buys a draft or sends gold, but that he would never think of paying more ; on the other hand, if the price falls to the import-point, it is the same thing to the seller of a bill whether he accepts 25.12 for it, or asks his correspondent to send gold, but he would certainly refuse to take less ; and the gold-points thus mark the highest level to which an exchange may rise, and the lowest to which it may fall.

VIII

THE LONDON COURSE OF EXCHANGE

All exchange business is transacted in London.—The Royal Exchange.—Dealings in bills.—The course of Exchange.—The double quotation.—Other capitals quote bills in the home currency, but London quotes some in sterling and some in foreign money.—Advantages of the practice.—Its drawback.—Some exceptions to the rule of quoting here as they quote abroad.—Anomalies in the list of places.—The great fault of a London Course of Exchange.—How bills are quoted in Vienna and Frankfort.—A suggested improvement.

THE next stage in the inquiry is to consider on what lines exchange-dealings are managed over here; and, in this connection, the first point that attracts attention is that there is but one market in the United Kingdom for the negotiation of foreign bills. All business of this nature centres in London. The provincial drawer either remits his paper direct to a “foreign banker” here, who buys it of him at the current price, or he hands it to his local banker, through whom it at once finds its way to the London agent, and thence to the bill-broker, who offers it for sale on the Royal Exchange.

There is perhaps no public edifice in the City which

is better known or less understood than the Royal Exchange. Familiar as its outlines are to the thousands of Londoners who daily pass by it, there is not one in a hundred that can tell why it was erected, or what purpose it serves. Nor, if they should enter it in quest of information, would they be much the wiser, for at most times they would find the interior either entirely deserted or only tenanted by a few loungers. It was not always so, however. The Royal Exchange was intended as a meeting-place for merchants, and up to a quarter of a century or so ago London merchants actually did meet there, each separate branch of trade collecting in its own corner or round its own particular pillar. But, as the various sections grew in numbers, it became more convenient to make homes for themselves in the localities that they specially affect, and the coal, wool, corn, produce, and other interests now possess their own separate Exchanges.

One important group still remains true to its allegiance. Twice a week, on Tuesdays and Thursdays,¹ the Royal

¹ Formerly Tuesdays and Fridays were the only days on which foreign mails were dispatched from London, and on those days alone were foreign bills negotiable on 'Change. It had always been the custom that bills bought on one "post-day" should be paid for on the next; but a notorious case (and not the first) having occurred of a house, that had bought cheques to a large amount, stopping payment before the following post-day, thereby involving the sellers in heavy loss, it was arranged in 1879 that, for the future, all bargains should be settled the next morning, in order that, if a similar case happened again, the cheques sold might be stopped by telegraph. At the same time the second day was altered to Thursday, as it was not to the convenience of the great Jewish houses to pay on a Saturday.

Exchange wakes up for a brief space. Immediately after luncheon-time those who have business to transact in foreign bills¹ begin to gather at the eastern end of the courtyard, and for about an hour 'Change is held. The assemblage, which is never a very large one—not more perhaps than five or six score at the outside—consists of a small number of brokers and of the chiefs of all the great foreign banking-houses. Of bankers, in the ordinary acceptation of the term, scarcely one is to be seen, except on rare occasions: London being perhaps the only great capital in the world of which the home-banking interest is not regularly represented on 'Change. There is an entire absence of noise or excitement. So quietly is the business transacted that it is difficult for an onlooker to believe that anything is going on. Now and again one observes a broker draw a likely buyer aside, covertly exhibit a contract-note, and suggest a price in a whisper. A simple nod of the head, almost imperceptible to a bystander, signifies acceptance²; the broker scribbles down the rate, passes

¹ According to the Bills of Exchange Act, 1882: "An inland bill is a bill which is, or on the face of it purports to be, (a) both drawn and payable within the British Islands, or (b) drawn within the British Islands upon some person resident therein. Any other bill is a foreign bill." A draft on London issued in Paris, or a draft on Paris issued in London, are therefore both foreign bills; but in common language a "foreign" bill is a bill payable abroad, and a bill on London drawn abroad would not usually be so styled.

² "When merchants come upon 'Change," says the *Ency. Brit.* (1810), "they are so full of fear and jealousies, that they will not open themselves to one another, lest they should discover what they want to conceal"; and it sagely adds, "no man feigns and dissembles, except when he thinks he has an interest in so doing."

over the contract, which the banker thrusts unconcernedly into his pocket, and the bargain is complete. In an hour or so all is over; and the broker hurries back to his office to write out his course of exchange, or list of current prices, a copy of which appears in the newspapers the next morning.

The following is a list as issued by a leading broker :

COURSE OF EXCHANGE.

LONDON, DECEMBER 8TH, 1891.

	TIME.	PRICES NEGOTIATED		
		From	To	
Amsterdam	<i>Short.</i>	12 1 ⁵ / ₈	12 2 ³ / ₈	} Guilders and stivers for £1.
Ditto	<i>3 Ms.</i>	12 3 ⁵ / ₈	12 4 ¹ / ₈	
Rotterdam	"	12 3 ⁵ / ₈	12 4 ¹ / ₈	
Antwerp and Brussels	"	25 45	25 50	} Francs and centimes for £1.
Paris	<i>Short.</i>	25 22 ¹ / ₂	25 27 ¹ / ₂	
Ditto	<i>3 Ms.</i>	25 37 ¹ / ₂	25 45	
Marseilles	"	25 38 ³ / ₄	25 45	} Reichmarks and pfennige for
Hamburg	"	20 51	20 55	
Berlin	"	20 51	20 55	
Leipsic	"	20 51	20 55	} Pence for 1 Rouble.
Frankfort on the Main	"	20 51	20 55	
Petersburg	"	22 ¹ / ₂	22 ¹ / ₂	
Copenhagen	"	18 40	18 44	} Kronors and öre for £1.
Stockholm	"	18 42	18 46	
Christiania	"	18 42	18 46	
Vienna	"	11 92 ¹ / ₂	11 97 ¹ / ₂	} Florins and kreutzers for £1
Trieste	"	11 92 ¹ / ₂	11 97 ¹ / ₂	
Zurich and Basle	"	25 52 ¹ / ₂	25 57 ¹ / ₂	
Madrid	"	41 ¹ / ₂	41 ¹ / ₂	} Pence for 1 Peso.
Cadiz	"	41 ¹ / ₂	41 ¹ / ₂	
Seville	"	41 ¹ / ₂	41 ¹ / ₂	
Barcelona	"	41 ¹ / ₂	41 ¹ / ₂	} Lire and centesimi for £1
Malaga	"	41 ¹ / ₂	41 ¹ / ₂	
Granada	"	41 ¹ / ₂	41 ¹ / ₂	
Santander	"	41 ¹ / ₂	41 ¹ / ₂	} Pence for 1 Milreis
Bilboa	"	41 ¹ / ₂	41 ¹ / ₂	
Zaragoza	"	41 ¹ / ₂	41 ¹ / ₂	
Genoa, Milan, Leghorn	"	26 12 ¹ / ₂	26 17 ¹ / ₂	} Pence for 1 Rupee.
Venice	"	26 12 ¹ / ₂	26 17 ¹ / ₂	
Naples	"	26 12 ¹ / ₂	26 17 ¹ / ₂	
Palermo and Messina..	"	26 12 ¹ / ₂	26 17 ¹ / ₂	} Pence for 1 Dollar.
Lisbon	<i>90 days date.</i>	40 ³ / ₄	41	
Oporto	<i>90 days date,</i>	41	41 ¹ / ₂	
Calcutta	<i>demand.</i>	1 ⁴ / ₁₆	1 ⁴ / ₁₆	} Pence for 1 Dollar.
Calcutta and Bombay..	<i>30 days sight.</i>	...	1 ⁴ / ₁₆	
New York	<i>document. papr.</i>	49 ³ / ₈	49 ³ / ₈	

Meaning of the Price.

Guilders and stivers for £1.

Francs and centimes for £1.

Reichmarks and pfennige for

Pence for 1 Rouble.

Kronors and öre for £1.

Florins and kreutzers for £1

Francs and centimes for £1.

Pence for 1 Peso.

Lire and centesimi for £1

Pence for 1 Milreis

Pence for 1 Rupee.

Pence for 1 Dollar.

The price-quotation is two-fold, the better rate being for first-class bank-paper and the worse for ordinary mercantile.¹ The margin, be it observed, is not the "turn of the market," as in Stock Exchange prices, but represents difference in value, the greater part of which is returned to the buyer in the shape of a better discount-rate. Paris, for instance, is quoted 25.37½ for best paper (large bills) to 25.45 for trade-paper (small bills): assuming that a buyer takes one of each and gets them discounted in Paris, where bank-rate stands at 3% and market-rate at 2%, the comparative outturn will be as follows:—

Bank-Paper.

$$\begin{array}{r}
 \text{£1} = 25.37\frac{1}{2} \\
 \text{Less discount } \left. \begin{array}{l} 3 \text{ mos. @ } 2\% \end{array} \right\} 12\frac{1}{2} \\
 \hline
 25.25
 \end{array}$$

Trade-Paper.

$$\begin{array}{r}
 \text{£1} = 25.45 \\
 \text{Less discount } \left. \begin{array}{l} 3 \text{ mos. @ } 3\% \end{array} \right\} 19 \\
 \hline
 25.26
 \end{array}$$

showing that, for the superior credit enjoyed by the acceptor of the former, the buyer has in reality only paid one centime per £. In most cases the variation is about ¼ per cent., but in the sterling rates it is higher.

As regards short paper, to which the explanation of better or worse discount-rate does not apply, the margin may be partially interpreted by pointing out that the

¹ The sterling exchanges are stated like ordinary prices, the cheaper first, but those expressed in foreign money reverse the order. If we quote the price of bills on Oporto as 41 pence to 41½ for 1 milreis, it would be only consistent to quote those on Berlin as 20.55 reichsmark to 20.51 for 1l.; and in some of the brokers' lists the difficulty is recognized and dealt with by the peculiar plan of changing the order of the *sterling* rates—Oporto, for instance, being stated as 41½ to 41.

“short” quotation is understood to include all bills having up to ten days to run, and that a sight-draft would naturally command a better price than one payable in a week’s time; but where cheques are quoted it is difficult to discover any apology for a variation of more than two points.¹

The London practice of quoting some exchanges in foreign money, and some in sterling, instead, as is usually the case elsewhere, of stating all in the home currency, constitutes the chief difference between the Course of Exchange published here and those published abroad. In Paris, all dealings are conducted in francs; in Berlin, in marks; in Amsterdam, in guilders, and so on; but in London we transact nearly all our business in *European*² bills, in the currency of the country which they are drawn upon. There are only three exceptions in fact, namely, Russia, Spain and Portugal, bills on which countries are bought and sold in pence, while all others are negotiated in marks, francs, florins, &c., as the case may be. We may even lay it down as a rule that, generally speaking, the exchange is stated in London in the same terms as it is stated abroad; that is to say, as most countries quote the price of London bills in their native currency, we follow suit, but as some capitals, such as Lisbon, Calcutta, Rio, Buenos Ayres &c., quote in sterling, we quote them in sterling.

¹ It would conduce to simplicity if only the middle price were stated. Every one would know that first-class paper was worth more, and inferior paper worth less, than the quotation.

² The exchanges with places outside Europe are mostly stated in shillings and pence.

The advantage of the practice is twofold. In the first place, it facilitates comparison between the rates current here and those current abroad. Thus, if a merchant intends buying a cheque on Paris, he need only look in the newspaper to see how the rate is telegraphed over, and he knows in an instant what he ought to pay : while, if the seller here stated his price in sterling, say as $9\frac{3}{8}\frac{1}{4}d.$ for one franc, or as 15s. $9\frac{3}{4}d.$ for one napoleon, it would require a troublesome calculation to ascertain the parity.¹ Secondly, we obtain a more manageable fraction by expressing a large unit, such as the pound, (the largest monetary unit there is), in terms of a small unit—especially if the latter is subdivided on the decimal system—than by stating the smaller in terms of the larger. To state the franc in terms of a pound would be simply impossible (at $25\cdot22\frac{1}{2}$, one franc is equal to $\frac{40}{10609}l.$) ; and even if we reduce the pound to pence, it is far easier to convert francs into sterling, or *vice versâ*, by taking the sovereign as equal to $25\cdot22\frac{1}{2}$ francs than by taking the franc as equal to $9\frac{3}{8}\frac{3}{4}$ pence : besides which, the latter fraction would be incapable of finer adjustment in practice than $\frac{1}{8}d.$ or $\frac{1}{8}$ per cent., while the former can be adjusted if need be to $\frac{1}{4}$ centime, which is only $\frac{1}{106}$ per cent.

¹ The inconvenience is very noticeable when we compare foreign lists together, thus :—

Berlin quotes Paris and Vienna in reichsmark.

Paris ,, Berlin and Vienna in francs.

Vienna ,, Berlin and Paris in florins.

On the other hand, it is quite certain that, however familiar quotations in foreign money may become to us, they never speak to the eye like quotations in our own money; and that price movements are far more easily and quickly followed if we see them stated in shillings and pence, than when they are clothed in strange figures. We may calculate with facility in francs or florins, but it is in pounds and shillings that we think. Notwithstanding this drawback, the fortuitous principle of quoting as they quote abroad is so useful, and so easily observed, that it is a great pity there should be any deviations from it, as there are. The first is Holland, which we quote in guilders (or Dutch florins) and the antiquated stiver,¹ although the Dutch themselves, since they adopted the decimal system, quote in florins and cents, and although bills on Holland are invariably drawn in florins and cents. The stiver being equal to 5 cents, a London quotation of 12.1 corresponds to a Dutch quotation of 12.05.²

Spain is another exception, being given in pence for one peso or piastre, which is a purely imaginary unit. The monetary system of the country was assimilated to that of France, Belgium, and Switzerland upwards of twenty years ago, and the franc, to which the name of peseta was given, adopted as the unit. The peso that we quote is their 5-franc piece, or dollar. Until a few years back there was some justification for not ac-

¹ The stiver ceased to be a money of account as far back as 1821.
Not 12.5.

knowledging the new system, inasmuch as the Spanish bankers themselves, especially those in Madrid, seemed reluctant to do so ; but it has at last come into general use, and Madrid, since the end of 1887, has been quoting London in francs and centimes, just as Paris does. It is now London's turn to recognise the change.

Petersburg and New York are also exceptions. The former is given on this side in pence for one rouble, and on the other in roubles for 10*l.*, and the latter we state in pence for one dollar, instead of in dollars to the pound, as it undoubtedly ought to be.

Turning to the list of places¹ that London quotes, we

¹ The places enumerated are supposed to be those currently dealt in on 'Change. Constantinople, Cape Town, Valparaiso, Bucharest, and such like, are not quoted, because there are no dealings to record. Drafts may, of course, be purchased in London on almost every town of importance in the world ; but business of an exceptional nature would be negotiated in the drawer's office, and not, as a rule, on 'Change. Originally the towns appear to have been placed in the order of their relative importance, the Dutch rate taking the lead ; and the present arrangement is practically the same as that of half a century

COURSE OF EXCHANGE. *Friday, Dec. 10, 1841.*

Amsterdam	12.4 $\frac{1}{2}$	4 $\frac{3}{4}$	Trieste	9.51	53
Ditto at sight ...	12.2	2 $\frac{1}{2}$	Madrid	36 $\frac{1}{2}$	
Rotterdam	12.4 $\frac{3}{4}$	5	Cadiz	36 $\frac{5}{8}$	$\frac{3}{4}$
Antwerp	12.4		Leghorn	30.20	25
Hamburg	13.10 $\frac{1}{4}$	10 $\frac{1}{2}$	Genoa	25.77 $\frac{1}{2}$	80
Paris 3 M. D. ...	25.75	77 $\frac{1}{2}$	Naples	40 $\frac{1}{8}$	$\frac{1}{4}$
Ditto 3 D. St. ...	25.50		Palermo	119 $\frac{3}{4}$	120
Marseilles	25.77 $\frac{1}{2}$	80	Messina	120	$\frac{1}{4}$
Frankfort	150	$\frac{1}{4}$	Lisbon	52	$\frac{1}{4}$
Petersburg	37 $\frac{5}{8}$	$\frac{3}{4}$	Oporto	52 $\frac{1}{4}$	$\frac{1}{2}$
Vienna	9.49	50			

ago, though now it has lost its meaning.

discover other peculiarities, the manner in which some of the exchanges are stated (especially those on Germany, Italy, and Spain), appearing intended to preserve the memory of a bygone state of affairs. Reference to an old Course of Exchange shows that in former days Berlin was quoted in thalers, Frankfort in florins, and Hamburg in marcs banco —whence the necessity of setting them forth separately: but differences of currency having been long ago abolished, the existing conditions would be fully satisfied by a single quotation for “Germany,” or “German Bankplaces.” In Italy,¹ also, the currency of the Republic of Genoa formerly differed from that of the Kingdom of Naples, and the currency of Naples from that of Sicily; but United Italy knows but one currency, and needs but one quotation (which, by the way, is all it receives in the exchange lists of Paris, Berlin and Vienna).

The Spanish quotation is still more abnormal. For some occult reason, more space is allotted to Spain than to France, Germany and Belgium combined; and one would certainly imagine, judging from the Course of Exchange, that our business with the Peninsula was of the first magnitude. Paris and Berlin, in their lists, are able to dispose of the country under “Madrid and Barcelona,” but London cannot apparently deal with it effectually under less than nine separate headings!

Redundancy is not the only fault, however. The

¹ Curiously enough the list of towns selected to represent Italy ignores Rome.

London Course of Exchange also possesses the far more serious drawback of being almost unintelligible without explanation, whereas its meaning throughout ought to be obvious to everyone. How easily it might be improved is best seen by comparing it with some of those issued abroad, most of which are drawn up so clearly that even the retail tradesman has no difficulty in understanding them. The following, for example, is an official list as published in Vienna:—

DEISEN.		Zinsfuss.	Gulden österreichischer Währung.					
			nie- drig- ster.	höch- ster.	heutiger Schlusscours.		Schlusscours der letzten Mittagsbörse.	
					Geld.	Waare.	Geld.	Waare.
Amsterdam f. 100 hol. Guld. vista	3	97.55	97.55	97.50	97.60	97.40	97.50	
Brüssel „ 100 Francs	3	...	...	...	...	...	...
Deutsche Bankplätze „ 100 Mrk. d. R.-W „	4	57.85	57.90	57.82 ⁵	57.90	57.80	57.90	
London „ 10 Pfd. Sterling „	4	117.70	117.75	117.70	118.—	117.60	117.95	
Italien. Bankplätze „ 100 L. n. v. it. (Fr.) „	5½	...	...	45.45	45.55	45.45	45.55
Franz. Bankplätze „ 100 Francs	3	...	...	...	...	...	...
Paris „ 100 „ „	3	46.70	46.72 ⁵	46.67 ⁵	46.75	46.65	46.70	
Petersburg „ 100 Rubel	6	...	...	...	...	...	...
Russische Plätze . . . „ 100 „ „	6	...	...	...	...	...	...
Schweizer Plätze . . . „ 100 Francs	4	...	...	46.52 ⁵	46.57 ⁵	46.52 ⁵	46.57 ⁵
Zürich „ 100 „ „	4	...	...	46.52 ⁵	46.57 ⁵	46.52 ⁵	46.57 ⁵

Taking the London quotation, we are told that the price is expressed in florins of Austrian currency, that it is for 10*l.* sterling at sight, and that Bank-rate in London stands at 4^o/_o. Then follow the lowest and the highest rates at which business was done, the closing quotations (Geld = money, or buyers ; Waare = goods, or

sellers), and the closing quotations of the last midday exchange.

Frankfort also takes care to supply every particular that can possibly be needed :—

WECHSEL.

In Reichsmark.

	Kurze Sicht.	2½—3 Monate.	
Amsterdam . . . fl. 100	168.90 bez.	168.90 B. 168.50 G.	3%
Antwp. Brüssel . . Fr. 100	80.70 bez.	—	3%
Italien Lire 100	79.40 à 45 bez.	—	6%
London Lstr. 1	20.450 à 455 bez.	20.525 B. 20.485 G.	5%
Madrid Ps. 100	—	—	5%
New York (3 Tage S.) D. 100	—	—	
Paris Fr. 100	80.80 à 85 bez.	80.80 B. 80.60 G.	3%
Schwz. Bkplätze . . Fr. 100	80.525 bez.	—	4½%
St. Petersburg . . S.R. 100	—	—	6%
Triest ö.fl. 100	—	—	
Wien ö.fl. 100	173.15 bez.	—	4%
Do. m. S	—	—	

Reichsbank-Disconto 4%.

Frankfurter Bank-Disconto 4%.

Here the exact meaning of the price is stated (*e.g.* Italy is in Reichsmark for 100 lire ; London in Reichsmark for 1*l.*), the discount-rate on the other side is given, and the quotations are distinguished as “business done” (bez. = bezahlt = paid), or buyers (G. = Geld = money) and sellers (B. = Brief = paper).

In the all-important requisites of clearness and conciseness, the superiority of both these lists over the London production is strikingly apparent, and English traders would certainly be justified in asking that the Course of Exchange be at least rendered self-explanatory and be cut down to more reasonable proportions. The following is put forward as a suggestion :

COURSE OF EXCHANGE.

Bank Rate, 4 %.

Market Rate, $2\frac{1}{4}$ %.

LONDON,

8th December, 1891.

PLACE.	Cheque.	Short.	3 Ms.	In- terest
Belgium (francs for 1 £)	25.25	...	25.47 $\frac{1}{2}$	3 %.
Calcutta (pence ,, 1 rupee)	16 $\frac{5}{8}$	...	...	...
Christiania (kronors ,, 1 £)	...	...	18.44	5 %.
Copenhagen (kronors ,, 1 £)	...	...	18.42	5 %.
France (francs ,, 1 £)	...	25.25	25.41 $\frac{1}{4}$	3 %.
Germany (marks ,, 1 £)	20.33	20.35	20.53	4 %.
Holland (guilders ,, 1 £)	...	12.10	12.20	3 %.
Italy (lire ,, 1 £)	...	...	26.15	5 $\frac{1}{2}$ %.
Lisbon (pence ,, 1 milreis)	...	...	41	6 %.
New York (dollars ,, 1 £)	4.85	...	...	...
Paris (francs ,, 1 £)	25.22 $\frac{1}{2}$	...	...	...
Petersburg (roubles ,, 1 £)	...	...	10.55	5 $\frac{1}{2}$ %.
Spain (pesetas ,, 1 £)	...	...	28.75	4 %.
Stockholm (kronors ,, 1 £)	...	...	18.44	...
Switzerland (francs ,, 1 £)	...	...	25.55	...
Vienna (florins ,, 1 £)	...	...	11.95	5 %.

It will be observed that the Dutch, American Russian and Spanish quotations have been altered in order to assimilate with the manner of stating the price on the other side, that the foreign bank-rate is placed by the side of the long exchange, that two or three useful cheque-quotations have been added, and that the supposed middle-price is stated throughout instead of giving the upper and lower limits. Whether the last mentioned feature would count as an improvement or otherwise is a matter of opinion, but it can hardly be disputed that the other alterations would be a distinct gain.



IX

THE TERMINOLOGY OF THE EXCHANGES

Unless care be exercised, the technical language of the exchanges may prove misleading.—Significance of “rise” and “fall,” “high” and “low,” when applied to rates expressed in foreign money.—“Premium” and “discount.”—“For us” and “against us.”—“Favourable” and “unfavourable.”—What business men mean when they describe a rate of exchange as favourable.—A useful rule of thumb.

UNTIL use and a practical acquaintance with the handling of the exchanges have rendered their distinctive peculiarities somewhat familiar, it is very necessary, in all cases where rates expressed in foreign money are concerned, that care be exercised to comprehend aright the import of their movements; for as “rise and fall,” “high and low,” signify in this connection just the converse of their ordinary meaning, and as the mind does not usually adapt itself without effort to the reversal of accustomed notions, these and similar expressions prove a constant pitfall to the unwary.

A “rise,” for example, of the Italian exchange means that more lire and centesimi must be given for the pound sterling. Consequently it is equivalent to a

decline in the value of Italian currency, and is therefore *against* Italy. A "fall" of the rate, on the other hand, would betoken improvement.

Again, the higher a broker buys and the lower he sells, the better for his client ; and if buyer and seller agree to come to terms by splitting the difference, the former lowers his offer and the latter raises it. Also, if sellers are urgent and press their bills for sale, the rate rises ; while if remittances are in great demand, the rate falls.

Though all this is simplicity itself, and though in practice its novelty rapidly wears off, it undoubtedly affords the novice every opportunity to blunder, and little apology is therefore needed for the introduction of a short maxim :

"Buy high, sell low ; the better the bill, the lower the rate," which may on occasion turn out to be a friend in need, and is well worth retaining in a corner of one's memory.

Another point that needs attention is the manner in which a rise or fall is described. If we read that a certain rate is a fraction higher, or that it has risen a point, no doubt can exist as to the writer's meaning ; but when the City Editor tells us that the New York exchange has improved a little, or that the Paris cheque rate is a trifle better, the information is liable to cause misapprehension owing to its ambiguity, and such terms are better avoided. A rise in the price of cheques on Paris is better for the English debtor, it is

true ; but for the English creditor, who has to draw on Paris, it is worse. From the point of view of the money-market the rise is good ; but from the point of view of the individual it is good or bad according as he is a buyer of bills or a seller, according as he has to remit to Paris or to draw.

The terms “premium” and “discount” have also been discarded in practice. It is quite correct to speak of a sterling exchange, such as that of Portugal or Brazil, being at a discount when below par ; but if we attempt to apply either of these definitions to a rate in foreign money, we are met with the incongruity of having to associate “premium” with a *fall*, and “discount” with a *rise* of the exchange. The par with Italy, for instance, is 25.22, and when the exchange is at $25.72\frac{1}{2}$ the lira is at 2% discount ; but it would sound irrational to say that the rate had gone up to 2% discount. “Premium” and “discount” are best confined to those cases—such as England and Australia, France and Belgium, New York and San Francisco, &c.—in which the two places concerned possess the same currency. Thus, Melbourne can quote London at 100 to 101, or it can with perfect propriety state the price “as par to 1% premium.”

Lastly, we find the exchanges designated as being “for” or “against” us, as “favorable” or “unfavorable.” Usually, this description is only applied to the chief gold exchanges, to those, namely, of New York, Berlin and Paris, and all it means is that the rates spoken of

are either over par (favorable) or under par (unfavorable), that is to say, tending either to the import or to the export gold-point. Harmless as it looks, however, the practice of so styling them is unsparingly denounced by political economists, who affect to see in it proof positive that business men are still firm believers in the economic heresy known as the Mercantile Theory.¹ As a matter of fact, the Mercantile Theory has no more to do with the question than the Binomial Theorem. There are perfectly good and simple grounds for regarding a high exchange as advantageous to business interests, and a low exchange as disadvantageous. Rightly or wrongly, cheap money, or a low charge for the loan of capital, is assumed to be better for trade than dear money, because trade is largely conducted on borrowed capital. It greases the wheels of industry, so to say. Now cheap money means a low bank-rate, a low bank-rate goes hand-in-hand with a strong Reserve, and the strength of the Reserve is dependent to a great extent on the course of the

¹ "Falsely and more misleading expressions cannot be conceived than the terms favourable and unfavourable exchanges. They survive still the memorable refutation of their untruth by Adam Smith; they involve ignorance of the very nature of all trade; they efface the living fact that men buy of foreign countries to procure goods for use and consumption, that all trade is only an exchange of goods. This language is profoundly unconscious that gold is a mere tool. It teaches that gold, or coin, or money is an end, a good thing for its own sake, an article worth giving one's wealth to obtain. It is saturated with the Mercantile Theory, so utterly in vain has Adam Smith written! . . . The value set on favourable exchanges is the greatest intellectual and literary wonder of our age."—*Currency and Banking*, by Bonamy Price.

exchanges. If New York, for instance, is drawing gold from us, thus weakening the Reserve and forcing the Bank to put up its rate in self-defence, a rise of the New York exchange will put a stop to the export, and, what is more, if the rise continues up to a certain point, the gold will begin to flow back again. As a consequence, the Reserve will recover strength, bank-rate will fall, and traders will again be able to discount their customers' acceptances at a moderate charge. This, and nothing more, is the reason for regarding a high exchange as favorable and a low exchange as unfavorable, and it is difficult to see in what respect it is tainted with the false reasoning of the Mercantile Theory.

It is well to bear in mind that, so far as exchanges in foreign money are concerned,

(High rates are for us, and low rates against us.)

X

THE ARITHMETIC OF THE EXCHANGES

Conversion of foreign money into sterling and *vice versa*.—Premium and discount.—Chain Rule.—Interest calculations.—“Tel quel” rates, what they are, and how to construct them.

THE greater part of the calculations that require to be made in connection with the traffic in foreign bills consist merely of reductions from foreign money into sterling, or *vice versa*, and are of so simple a nature as scarcely to call for remark. It may be well, however, to direct attention to the time-saving methods adopted in actual practice by experienced calculators.

1. Let it be required to find the sterling equivalent of Fcs. 18914.75 @ 25.37 $\frac{1}{4}$.

HOW NOT TO DO IT.

$$\begin{array}{r}
 253725 \text{) } 189147500 \text{ (} 745 \\
 \underline{1776075} \\
 1154000 \\
 \underline{1014900} \\
 1391000 \\
 \underline{1208625} \\
 122375 \\
 \underline{20} \\
 2447500 \text{ (} 9 \\
 \underline{2283525} \\
 163975 \\
 \underline{12} \\
 1967700 \text{ (} 7 \\
 \underline{1776075} \\
 191625 \\
 \underline{4} \\
 766500 \text{ (} 3 \\
 \underline{761175} \\
 5325
 \end{array}$$

$$= \text{£}745 \ 9 \ 8$$

ABBREVIATED METHOD.

$$\begin{array}{r}
 \text{£}5.3725 \quad 1891475 \\
 10,1,4,9 \quad 7565900 \text{ (} 745 \cdot 482 \\
 \underline{46160} \\
 55640 \\
 \underline{4895} \\
 835 \\
 \underline{23}
 \end{array}$$

$$= \text{£}745 \ 9 \ 8$$

2. Convert into sterling 1000 Dutch florins and 75 cents @ 12.3 $\frac{5}{8}$.

$$3.625 \text{ stivers} = 18.125 \text{ cents.}$$

$$\begin{array}{r} 12.18125 \\ 9,7,4,5 \\ \hline 1600.75 \\ 800600 \text{ (} 82.155 \\ 21000 \\ 1510 \\ 536 \\ 49 \\ \hline = \text{£}82 \text{ } 3 \text{ } 1 \end{array}$$

3. Convert 4975*l.* 14*s.* 9*d.* into Austrian florins @ 11.92 $\frac{1}{2}$.

HOW NOT TO DO IT.

$$\begin{array}{r} 11.925 \\ 4975 \\ \hline 59625 \\ 83475 \\ 107325 \\ 47700 \\ \hline 59326.875 \\ 5.962 = 10s. \\ 2.385 = 4s. \\ .208 = 6d. \\ .149 = 3d. \\ \hline 59335.669 \\ \hline \hline \end{array}$$

ABBREVIATED METHOD.

$$\begin{array}{r} 4975.7375 \\ 52911 \\ \hline 49757375 \\ 4975737 \\ 4478164 \\ 99515 \\ 24878 \\ \hline 59335.669 \\ \hline \hline \end{array}$$

As it would occupy too much space to explain in detail the successive steps in the abbreviated processes, the student is referred for particulars to Brook-Smith's Arithmetic.¹ (Macmillan & Co.)

Problems in which the question of a premium or discount are involved also occasionally come forward for solution.

¹ § 87, Criteria of Divisibility.

§ 51 and 153, Contracted Division.

§ 152, Contracted Multiplication.

§ 274 and 275, Reduction of shillings and pence to the decimal of a pound, and the converse.

4. If the gold premium in Buenos Ayres is at 275, what discount does the paper dollar stand at ?

When gold is at	par,	100 \$	paper =	100 gold.
„	10 prem.,	110 \$	„	= 100 „
„	275 prem.,	375 \$	„	= 100 „

If \$375 paper = \$100 gold, \$1 paper = $\frac{100}{375}$ gold,
and the paper dollar therefore stands at $\frac{375}{100}$, or 73 $\frac{1}{3}$ % discount.

In exchange computations of a more advanced character a knowledge of Chain Rule is essential. This is the arithmetical operation which, by means of a chain of intermediate relationships, establishes a comparison between two quantities not directly related. If we wish, for instance, to ascertain the value in French money of 80 reichsmark we must first seek some intermediate link of connection between the French and German currencies. Finding this in the fact that 25.22 francs or 20.43 marks are each equal to 1*l.*, we draw up the following equation :—

$$\begin{aligned} &? \text{ francs} = 80 \text{ marks} \\ \text{if marks } 20.43 &= 1 \text{ pound} \\ \text{and pound } 1 &= 25.22 \text{ francs} \end{aligned}$$

and on dividing the product of the quantities on the right-hand side by the product of those on the left, thus :

$$\frac{80 \times 1 \times 25.22}{20.43 \times 1} = 98.76$$

obtain the result that (on the basis of the specie-pars with London) 98.76 francs are equal to 80 marks.

The utility of the method is better appreciated, however, in cases where the quantities to be compared are less nearly related than in the above instance, and

where, consequently, the intermediate links are more numerous.

5. If $934\frac{1}{2}$ sovereigns are contained in twenty pounds troy of standard gold, $\frac{11}{12}$ fine, and if 155 twenty-franc pieces are coined from one kilogramme of gold, $\frac{9}{10}$ fine (the kilogramme being equal to 2·679227 pounds troy), find the value of 100 francs.

? pounds	=	100 francs.
3100	=	1 Kg. gold $\frac{9}{10}$ fine.
10	=	9 Kg. fine.
1	=	2·679227 lbs. fine.
11	=	12 standard.
20	=	$934\frac{1}{2}$ pounds sterling.

$$\text{£s. reqd.} = \frac{100 \times 9 \times 2\cdot679227 \times 12 \times 934\cdot5}{3100 \times 10 \times 11 \times 20} = \text{£}3\cdot964 = \text{£}3 \ 19 \ 3\frac{1}{2}$$

As a guide to drawing up the equation, which is the only difficulty, it should be noted that :

- 1, the first link in the chain states the question ;
- 2, the chain must begin and end with factors of the same denomination ;
- 2, the first factor of every link must be of the same denomination as the second factor of the preceding link.

Care must also be taken when comparing prices or list-quotations, &c., to see that the time element (or what business men call the "value" of the item) agrees ; that is to say, if a three-months quotation in one country is compared with the cheque-rate of another, or a price "for cash" with a price "per settling day," the difference of interest must either be added to the one or deducted from the other.

On reference to the Course of Exchange it will be observed that, with the single exception of Calcutta, which is quoted at 30 days sight, the long price applies in every instance to three-months paper (meaning of course not necessarily bills drawn at that currency, but bills which have three months to run from the date of sale); but as nine bills out of ten either exceed or fall short of three months, almost every transaction involves a charge or an allowance for interest. If the term exceeds the usance, it is usual to make an allowance to the buyer at a rate somewhat in excess of the foreign *bank-rate*:¹ and frequently it is necessary to make some concession in the price as well, as such bills are not considered negotiable. On the other hand, if the bill is under three months—an extremely common case—the deficiency is charged to the buyer at about the foreign *market-rate*. There are two ways of treating the difference of interest. The simpler and more usual method is to charge the bill at the three months rate, and to reckon the interest separately, thus:

OVER THREE MONTHS
(Say from 19th January.)

Lit. 3000	30 April, Rome.	Lit. 3000	30 April, Rome.
@ 26·20	£114 10 1	or,	4·52, less 11 days @ 5%.
less 11 days @ 5%	3 6		
	<u>£114 6 7</u>		Lit. 2995·48 @ 26·20 = £114 6 7 ²

¹ Because the discount charge on the other side is generally higher on bills over three months.

² On a single bill it is immaterial whether the interest be computed in foreign money or in sterling; but if two or more of different

UNDER THREE MONTHS.
(Say from 19th January).

Lit. 3000	19 March, Rome.		Lit. 3000	19 March, Rome.
@ 26·15 =	£114 14 6	or,	10·20 + 31 days @ 4%,	
+ 31 days @ 4%	7 10			
	<u>£115 2 4</u>		Lit. 3010·20 @ 26·15 =	£115 2 4

But in some cases the system is adopted of increasing or diminishing the *price* by the amount of the difference

maturities are sold together, the interest must be calculated in foreign money by the system of “numbers” or “products,” in this way:—

LONDON, 19th January.

M	9850.—	15 March.	Berlin	35	3447	
„	11270.—	23 „	„	27	3043	
„	12140·40	5 April.	„	14	1700	
„	10209·15	10 „	„	9	919	
	<u>43469·55</u>				<u>9109</u>	($\times \frac{3\frac{1}{2}}{365} = 87·35$.)
	87·35 + Int. @ 3½ %					
	<u>43556·90</u>	@ 20·53	£			

The sum is multiplied by the number of days (to or from 19 April—three months from 19 January), and the product, *after cutting off the two right-hand figures*, is noted down. The products are then added together, and the result on being multiplied by the rate per cent. ($3\frac{1}{2}$), and divided by 365, gives the required amount of interest. Or, instead of multiplying by the rate per cent. and dividing by 365, we may multiply by double the rate and divide by 730, the advantage of this method being that division by 730 can be easily and quickly effected by what is known as the “third, tenth and tenth” rule, thus:—

	9109
	<u>7</u>
	63763
add one third,	21254
„ one tenth,	2125
„ one tenth,	<u>212</u>
add together and mark off three places of decimals	<u>87·354</u>

of interest; in other words, instead of adjusting the principal and allowing the price to stand, you adjust the price and allow the principal to stand. Treating the bill abovenoted (Lit. 3000, per 19 March) in this manner, we would say—

$$\begin{aligned} 1 \text{ month at 4 per cent. p. a.} &= \frac{1}{3} \text{ per cent. (or } 4\% \text{ on } 26\cdot15 = 104 \text{ cents.)} \\ \frac{1}{3} \text{ per cent. on } 26\cdot15 &= \cdot08\frac{3}{4}^1 \quad \left(\frac{1}{1\frac{1}{2}} \text{ of } 104 = 8\frac{2}{3} \text{ ,,} \right) \\ 26\cdot15 - \cdot08\frac{3}{4} &= 26\cdot06\frac{1}{4} \end{aligned}$$

Lit. 3000 per 19 March, Rome.

$$@ 26\cdot06\frac{1}{4} \text{ t.q.} = \text{£}115 \quad 2 \quad 2$$

A rate constructed to correspond to the term of the bill is technically designated “tale quale” or “tel quel,” meaning that it applies to the bill “such as it is,” or that the price is *net*. “Tel quel” rates are mostly met with in the case of bills drawn in sterling,² and made payable at the endorsed rate of exchange.

When a number of “tel quel” prices have to be computed it is generally advisable (in the case of bills on France, Italy, &c.) to ascertain how many days’ interest at the given rate amounts to $1\frac{1}{4}$ c.,¹ and to use this number as a divisor. For instance, let us suppose that “tel quel” prices are required for bills per 8 March, 19 March, and 11 April, all on the basis of 26·15 for

¹ Strictly speaking, $\frac{1}{3}\%$ of 26·15 is $8\frac{2}{3}$, but the rates of exchange on France, Belgium, Switzerland and Italy move by steps of $1\frac{1}{4}$ c. or $\frac{1}{2}$ per mille (from 26·10 to $11\frac{1}{4}$, from $11\frac{1}{4}$ to $12\frac{1}{2}$, from $12\frac{1}{2}$ to $13\frac{3}{4}$, and so on), except in the case of cheques on Paris, which advance by centimes, or even by half-centimes. Germany moves 1 pfennig at a time, which is again $\frac{1}{2}$ per mille.

² See next chapter.

three months' paper (per 19 April) with 4% interest ; it is best to proceed as follows :—

365 d.	interest on 26·15 at 4% is	104c.
36 d.	„ „	10c.
$4\frac{1}{2}$ d.	„ „	$1\frac{1}{4}$ c.

8 March is 42 days short ; 42 divided by $4\frac{1}{2}$ gives 9 (nearest) ; 9 times $1\frac{1}{4}$ c. is $11\frac{1}{4}$ c., and the appropriate exchange is therefore 26·15 less $11\frac{1}{4}$ = 26·03 $\frac{3}{4}$.

19 March is 31 days short ; $\frac{31}{4\frac{1}{2}} = 7$; $1\frac{1}{4} \times 7 = 8\frac{3}{4}$; 26 15 - $8\frac{3}{4}$ = 26·06 $\frac{1}{4}$.

11 April is 8 „ $\frac{8}{4\frac{1}{2}} = 2$; $1\frac{1}{4} \times 2 = 2\frac{1}{2}$; 26·15 - $2\frac{1}{2}$ = 26·12 $\frac{1}{2}$.

6. State the t. q. rate (to the nearest $\frac{1}{8}$ of a stiver) for a bill on Amsterdam at $2\frac{1}{2}$ months, the 3 months exchange being $12.3\frac{5}{8}$ and interest $2\frac{1}{2}$ per cent. per annum.

Here it is best to begin by reducing the exchange to eighths of stivers :—

$$12.3\frac{5}{8} = 1949 \text{ eighths of stivers,}$$

and then to continue thus :—

$$21\frac{1}{2}\% \text{ on } 1949 = 48\frac{1}{2} \text{ (interest for 1 year).}$$

$$48\frac{1}{2} \div 24 = 2 \text{ (interest for } \frac{1}{2} \text{ month).}$$

$$12.3\frac{5}{8} - \frac{2}{8} = 12.3\frac{3}{8}, \text{ t. q.}$$

7. Find the t. q. rate (to the nearest $\frac{1}{32}$ of a penny) for a bill on Petersburg at 4 months, taking the 3 months exchange at $23\frac{1}{4}$ d., and interest at $5\frac{1}{2}$ per cent. per annum.

Again it is best to begin by reducing the exchange :—

$$23\frac{1}{4} \text{ d.} = 744 \text{ thirty-seconds of a penny.}$$

$$5\frac{1}{2}\% \text{ on } 744 = 41 \text{ (interest for 1 year).}$$

$$41 \div 12 = 3 \text{ (interest for 1 month).}$$

$$23\frac{1}{4} - \frac{3}{32} = 23\frac{5}{32} \text{ t. q.}$$

N.B. A bill at $2\frac{1}{2}$ months on Amsterdam is better than a bill at 3 months ; and (as the price is in foreign money) “ the better the bill the lower the rate.” Therefore the interest difference must come off the rate.

On the other hand, a bill on Petersburg at 4 months is not so good as one at three months, and must be charged at a lower price ; but, in this case, the price is in sterling, and the interest difference must therefore again come off the rate.

XI

FOREIGN BILLS IN THE HOME CURRENCY

A peculiar custom.—Advantage of drawing in sterling.—Why the exchange is fixed in London.—If a sterling bill has less than three months to run, how should it be endorsed?

THERE has long prevailed a remarkable usage among English traders of drawing on their foreign customers in pounds sterling (instead of in the currency in which the bill will be paid), and of making their drafts payable at a rate of exchange to be endorsed in London:—

“Manchester, 18th January, 1892. £350 14s. 2d.

Three months after date pay this First of Exchange (second unpaid) to the order of Messrs. E. F. & Co., the sum of three hundred and fifty pounds, fourteen shillings and twopence, *at the rate of exchange as per first London endorsement*, value of the same, and charge to account as advised.

To Messrs. C. D. & Co.,
Venice.

A. B. & Co.”

The practice is quite peculiar to this country, as one never sees a bill drawn on London in dollars or marks,

&c., and expressed as payable at a rate to be fixed by endorsement in New York or Berlin, &c.

Such drafts are not, as a rule, of very large amount, and probably arise out of transactions which it has been agreed to settle "to a point." The advantage they present to the drawer over a bill in foreign money is that he is thus enabled to encash the exact amount of his invoice, and has neither the trouble of quoting prices in other currencies, nor the risk of a loss in the exchange.¹ If he drew up his price-lists in foreign money his quotations would have either to include a margin (in some cases a large one) for fluctuations in rates, or to undergo continual revision; but by quoting and drawing in pounds and shillings he shifts the speculative part of the bargain on to the shoulders of the buyer, and, if the latter can see his way to make a profit on the exchange, is quite willing to let him make it.

The object of making the bill payable at the endorsed rate is to ensure that the exchange shall be fixed impartially. If it were remitted abroad as a sterling bill,

¹ The custom originated in the desire on the part of the drawer to protect himself from the effect of fluctuations which he could neither foresee nor measure. We thus find the *Economist* giving British traders the following advice in 1854:—"From the moment that Russia adopts this step (issue of inconvertible notes just previous to Crimean War), foreign merchants having transactions with Russian subjects should invariably conduct their business in the denomination of the currency of their own country in place of that of Russia, and stipulate to be paid in bills upon London, Paris or Hamburg, computed accordingly. No matter then how low the exchange may fall in Russia, the debtor must provide whatever number of roubles is required to purchase a bill for the necessary amount expressed in the stipulated currency."

the onus of determining the rate would be cast upon the banker who presented it ; and it is more than likely that in so doing he would find himself at loggerheads with the acceptor. The London banker who signs the endorsement is therefore as it were, constituted umpire, and is expected to "see fair" between the conflicting interests: though there is reason to doubt whether he himself acknowledges any obligation on that score.

When the bill is sold, the rate at which it must be paid is specified in the endorsement :

" Pay G. H. and Co., or Order,
at the exchange of 26 lire and
15 centesimi for £1 sterling,"

and the conversion into foreign currency is effected by the buyer, who writes the rate and the new amount on the face of the bill, just above the figures of the sterling amount (thus, if the draft is for 100*l.* he inserts on the upper margin,

"@ 26.15 = Lit. 2615⁰⁰"),

and treats it thereafter exactly as though it had originally been drawn in foreign money. In order that the drawee may verify the exchange, as well as know what sum he will be called upon to pay, it is necessary that he should be advised of the rate at which the bill has been negotiated, and this duty devolves upon the drawer,

If a bill of this description should be sent up for negotiation which has less than three months to run, there should always be a distinct understanding as to whether the difference of interest belongs to the drawer or to the drawee, for, unless instructions are given to the contrary, the bill in such a case will be endorsed at the "tel quel" rate, and the acceptor thus gain a difference to which he may not be entitled. For instance, supposing a merchant in Manchester has sold goods to the amount of 600*l.* against a three months' bill, but that, owing to some oversight, a fortnight is allowed to elapse before he gives the bill to his banker: if no remark be made, it will be endorsed and sold in London at the "tel quel" exchange, which, on the basis of Lit. 26.15 and 4 per cent for three-months paper, will be Lit. 26.11½, so that the acceptor will gain a fortnight's interest and the drawer lose it,—that is to say, the acceptor will pay only Lit. 15667.50, instead of Lit. 15690, and the drawer will receive only 600*l.* instead of 600*l.* plus interest. The proper thing for the drawer to have done under the circumstances was to give instructions that the bill should be endorsed at the full three months' rate,¹ and that he should be credited with the difference. The broker would then have

¹ As it was his fault that the bill was not negotiated a fortnight ago he would have to bear the loss, if the rate had gone up, of the difference between the exchange as now and the exchange as it was then.

endorsed it at 26·15, and have charged it to the buyer as follows :—

£600	at $2\frac{1}{2}$ months (@ 26·15 = Lit. 15690.)
1	Interest $\frac{1}{2}$ month a 4 %.
<hr/>	
£601	
<hr/>	

so that the drawer would get the 1*l*. that belonged to him.

Though of technical importance, the point is not of general interest, and will be best appreciated by those who are in the habit of drawing such bills.

XII

THE LONG EXCHANGE

What is the long exchange?—Interest.—Bill-stamp.—The question of credit.—Why interest is taken at the foreign rate.—The allowance for interest varies with the class of paper, because the discount-charge on the other side also varies.—Long and short rates from the foreign standpoint.—Arbitrage business and its influence on rates.—A practical illustration.—The sight-exchange between two countries cannot be rising on one side while falling on the other.

OUR next step will be to examine, as far as we are able, into the causes that produce fluctuations of the exchanges; but as these causes differ in their incidence, some affecting the exchange as a whole, whether expressed as the rate for cheques, for short bills, or for long bills, while others act upon the time rates only, it will be conducive to clearness if we first deal with the long rate of exchange, asking what it is, what its component parts are, and under what circumstances it is liable to vary independently of the sight-rate.

The long exchange is the price of a bill payable a certain length of time—in most cases three months—after the day of purchase. If therefore a merchant should give 100*l.* on the 21st January for a bill, he will

have to lie out of his money until the 21st April, and, if money is worth 4 per cent. per annum, he will be entitled on that date to receive the equivalent of 101½. Interest, consequently, is the first and principal constituent of the long, as distinguished from the sight, exchange.

In the next place, the foreign bill-stamp must be considered. On a cheque it is too small to be worth mentioning ; but on the bill he will have to pay at least one-half per mille, which is the usual tariff abroad, and this he of course takes into account.

Lastly, there is the question of credit. A bill, after all, is only a joint promise to pay ; and the promise may not be kept. Its value rests on the joint security of drawer and acceptor ; but, though he knows the drawer well enough, the name of the acceptor may be strange to him. He may feel sure that the drawer is quite good for the amount at present, and that if it were only a question of buying a sight-draft the risk would be *nil* ; but between this and April the failure of a bank, or a crisis somewhere abroad, or any one out of half-a-dozen other contingencies, may bring him to the ground, and then all that the buyer would have to represent his money, would be the promise-to-pay of an unknown house in a foreign country. Practically, the risk may amount to very little, but nevertheless, there it is, and why should he incur it for nothing ? Whatever he may assess it at in his own mind, that much the less is he willing to give for a bill as compared with a cheque.

The long rate, then, may be defined as :

- = sight-rate
- + three months interest at the foreign rate
- + foreign bill stamp
- + some allowance for contingencies.

Let it be the long rate on Paris that he wishes to arrive at, the cheque-rate being $25.28\frac{3}{4}$, and interest 3% , then

$$\begin{aligned} x &= 25.28\frac{3}{4} + .19 + .01\frac{1}{2} + ? \\ &= 25.49\frac{1}{4} + ? : \text{and if he takes the consideration for} \\ &\quad \text{risk at the odd } \frac{3}{4}\text{c.,} \\ &= 25.50 \end{aligned}$$

Having bought a bill for Fcs.2550, for which he pays 100% down, he sends it to his business connection in Paris for the credit of his account, and as one of the conditions of the account is that the balance of interest to debit shall be charged at one-half per cent. over bank-rate, it is to his advantage to have the bill credited at once under discount, and he accordingly gives instructions to that effect. By return he receives the following credit-note :—

Fcs.2550.—	per 21 April, Paris.
	19.12 $\frac{1}{2}$, 3 mos. discount @ 3 %.
20.62 $\frac{1}{2}$	1.50 stamp
Fcs.2529.37 $\frac{1}{2}$,	

which comes out a trifle better than if he had bought a cheque, but, on the other hand, leaves him under liability on his endorsement for three months to come.

The statement explains why he took the interest at

three per cent. in his calculation. It was because three per cent. is the bank-rate in Paris, and is what he has to pay when he discounts the bill. If he refrains from discounting he will have to pay his correspondent $3\frac{1}{2}$ per cent., but that, of course, has nothing to do with the seller of the bill, who would decidedly object to allow more than the Paris bank-rate. The point to be noticed, however, is that only the rate on the other side must be regarded, and not the rate on this, which is beside the question.

The foregoing is supposed to be ordinary commercial paper, which discounts at bank-rate; but if the transaction had been on a larger scale, and if the merchant, instead of buying trade-bills, had laid out 1000*l.* in first-class bank-paper, he would expect to be credited for it at the best market-rate, say $2\frac{1}{2}$ %, thus:—

Fcs.25500.—	per 21 April, Paris.
	159.37 $\frac{1}{4}$, 3 mos. discount @ $2\frac{1}{2}$ %.
172.37 $\frac{1}{2}$	13.— stamp
<u>Fcs.25327.62$\frac{1}{2}$</u>	

This gives a net exchange of $25.32\frac{3}{4}$, and it is not to be supposed for a moment that the seller will make him a present of the difference. Being well aware that a bank-bill will discount at $2\frac{1}{2}$ per cent., the seller holds out for a correspondingly better price, and the competition of other buyers forces the merchant to give, say, $25.46\frac{1}{4}$, which brings the net cost to about 25.29.

The allowance for interest in the long exchange is

based, therefore, on the foreign bank-rate in the case of commercial paper, and on market-rate, or thereabouts, in the case of bank-paper. If bank-rate changes, or is expected to change, the long-rate changes; so that, even if the sight-exchange remained permanently fixed, the three-months' rate would rise or fall with every alteration of interest.

As to the other variable element, the allowance for contingencies, the only rule that can be laid down is that it varies inversely with the quality of the bill, being low on good and high on inferior-class paper. The list-quotation only applies, of course, to sound bills, so that this constituent is hardly noticeable. In individual cases it crops up occasionally—a merchant who is known to have met with losses experiencing difficulty in selling his long paper except at a reduced price—but in the long-exchange on a country as a whole its influence is rarely perceptible. Now and again, however, instances are met with; for whenever credit is disturbed at a business centre, merchants in other countries give the preference to short, rather than long, paper in order to minimize the risk, and the price of the latter gives way.

Having seen how the long-exchange is put together from the London point of view, let us now imagine ourselves on the continent, regarding it, we will suppose, from the standpoint of a merchant in Italy who has to remit to London. The longer the bill, the less he will give for it. For a pound due at once he pays perhaps 25.80, but for a pound due in three months

he will only give 25.80, less three months' interest. Instead, therefore, of *adding* interest and stamps to the sight-rate, he *deducts* them; so that the long-rate, whenever the exchange is expressed in the currency of the country that draws the bill, is lower than the sight rate. This double aspect of the long-rate—higher than the sight-exchange if viewed from the one side, and lower than the sight-exchange if viewed from the other—may be illustrated by a practical example, which will also serve to show how the quotations in the Course of Exchange are arrived at. A foreign banker in London, let us suppose, has opened an arbitrage account with a correspondent in Italy, and does business with him on the profit-sharing principle. On the Tuesday or the Thursday morning he receives a telegram stating the price at which the latter can buy ordinary three-months' trade bills on London, and the rate at which he can discount similar paper on Italian bank-places. The message runs, "2560 5," on which basis the banker proceeds to calculate as follows:—

$$\begin{array}{rcl}
 25.60 & = & 3 \text{ months London in Italy,} \\
 \text{add } 19\frac{1}{4} & & 3 \text{ months' discount in London at } 3\% \\
 \text{,, } 2 & & \text{London bill-stamp } \frac{1}{2}\%_{\infty}, \text{ and loss of} \\
 & & 3 \text{ days' grace.} \\
 \hline
 25.81\frac{1}{4} & = & \text{Sight-rate.} \\
 \text{,, } 32\frac{1}{4} & & 3 \text{ months' discount in Italy at } 5\% \\
 \text{,, } 1\frac{3}{4} & & \text{Italian bill stamp } \frac{3}{5}\%_{\infty} \\
 \text{,, } 1\frac{1}{2} & & \text{Postages and telegrams.} \\
 \hline
 26.16\frac{3}{4} & = & 3 \text{ months Italy in London,}
 \end{array}$$

and finds that long bills on Italy should cost about 26.16 $\frac{3}{4}$, brokerage extra. Then he goes on 'Change to see what he can do. If the price stands anywhere between 26.14 and 26.19 he may think it hardly worth while operating, and do nothing. But bills, being plentiful, may be offered at 26.20, in which case he is tempted to buy; or, being scarce, he may be able to dispose of a cheque at 25.77 $\frac{1}{2}$, in which case he draws on his correspondent and sells. Take the former case, and say he buys a thousand pounds' worth. After 'Change is over he wires his correspondent, "Bought 1000," and the same evening sends him a bill for Lit.26200 at three months. The latter, on his part, at once buys and dispatches a parcel of bills amounting, we will say, to 1008*l.* 2*s.* 2*d.*, on London, which at 25.60 cost him Lit.25807.55. Two or three days afterwards the following statements are exchanged:—

A. B. & Co., London.

Crs.

L.26200.— 3 months, Italy.

327.50 3 months' discount @ 5 %.

343.70 16.20 stamp.

L.25856.30 (against a debit of L. 25807.55).

C. D. & Co., Italy.

Crs.

£1008 2 2 3 months, London.

7 11 2 3 months' discount @ 3 %.

8 2 2 11 0 stamp.

£1000 0 0 (against a debit of £1000).

It is seen that on this side the transaction balances, but that on the other the joint account shows a profit of about 50 lire, or nearly 1 per mille each.

This is an instance of arbitrage business, which plays a very important part in the economy of the exchanges, for it not only acts as a leveller of the differences that may arise on either side, but, like the fly-wheel of an engine, converts what would otherwise be a series of jerky movements into a steady and gradual rise or fall.

Before passing on, look again at the two long-rates, and notice that long London, plus our stamp and interest, gives sight-rate, and that sight-rate, plus the Italian stamp and interest, gives long Italy. The sight-exchange must always be the same, or practically the same, on both sides; and cheques on Italy cannot be in demand and rising in value in London at the same time that cheques on London are demanded and rising in Italy. In other words, the sight-exchange between two countries cannot be rising on one side and falling on the other.¹

Paper on London rises in Italy, or in Paris, or in Berlin, &c., when paper in these places falls in value in London, and *vice versâ*.

¹ Unless each quotes in its own currency. London quotes New York in pence, and New York quotes London in dollars; consequently the sight-rate expressed in dollars to the pound is falling, the sight-rate expressed in pence to the dollar must simultaneously be rising.

XIII

FLUCTUATIONS OF THE EXCHANGES

Why people pay more, or take less, for a bill than its face-value.—The rate is affected only by those transactions which have to be settled.—The supply of bills on London *versus* the demand.—The influence on the exchange of ordinary trade.—Of Stock Exchange business.—Of foreign loans, and the interest on them.—Of mercantile credits.—Of travellers' credits.—Of blank credits.—Of arbitrage and speculative transactions.

WE now approach the main question, namely, the determination of those influences which produce fluctuations in the sight-exchange, and, consequently, in the exchange as a whole, for, as long-rate is based upon sight-rate, whatever affects the latter, must necessarily affect the former also.

People say that the worth of a thing is what it will bring: so, if a cheque for Fcs.10,000 will bring more this week than it would last, it ought to be worth more; but how can it be worth more if the coins that it represents have a fixed value in pounds sterling?

The question is not new to us. We already know that, within certain limits, the cheapest way of sending

money from one country to another is to buy and remit a bill of exchange ; that the exchange can only fluctuate within, and not beyond, those limits, which are called gold-points ; and finally, that the movements of the exchange between gold-points are determined by the equation of supply and demand—that is to say, the exchange either is, or tends to become, such as to produce an equality between supply and demand. If supply falls off, or demand increases, bills grow dearer ; if supply increases, or demand falls off, they become cheaper¹ : the rise or fall of price continuing until the demand and the supply are again equal to one another.

The fact of bills on London being dear abroad, and the exchange in our favour, is a proof that there is a balance due to us on the transactions *that have to be settled up*. All the world, it might be said, owes us money ; but it is only those debts which fall due, and have to be paid off, that affect the exchange.

On the other hand, if bills on London are cheap, and the exchange against us, it proves that, for the time being, we have more to pay than we have to receive.

Why at any particular time we should have more to pay than to receive, or more to receive than to pay, is a problem which it is always difficult, if not impossible,

¹ “Those who are creditors on Paris fear the balance due to London ; those who are debtors to Paris dread a balance due to Paris. The interest of the first is to dissemble what they fear, that of the last to exaggerate what they wish,”—*Ency. Brit.* (1810).

to solve. A rate of exchange is the condensed effect of a variety of facts and forces which are too numerous and too complex to admit of exact appraisement; and, in the majority of cases, the best explanation we can give of an exchange-movement, is to pick out one prominent cause, which we know to be at work, and to hazard a guess at the others. As the question turns, however, on the interaction of supply and demand—on the ratio that the production of bills bears to the consumption—something may at least be learnt by attempting to split these up into their component parts, with a view to ascertain, on the one hand, what are the chief circumstances connected with commerce or finance that give rise to the creation and sale of bills of exchange, and, on the other, whence arises the necessity of purchasing such bills for purposes of remittance.

In order to do this effectually, it will again be necessary to look at the matter through foreign spectacles, as it would be mere waste of time to begin analyzing the handful of bills drawn from London on abroad. It is the supply of bills *on London*, as compared with the demand for bills *on London*, that sways the exchange, and it is these we must examine.

The chief heads, then, under which bills on London may be arranged are: Exports, Securities, Loans, Credits, and Arbitrage; and the purposes for which they are bought may be described as: Imports, Freights, Securities, Interest, Credits, Arbitrage, and Investment (see table facing title-page).

These heads may again be classed as :—

Trade influences on the exchange, viz., Imports,
Exports, and Freight ;

Stock Exchange influences, viz., Securities, Loans,
and Interest ;

Banking influences, viz., Credits, Arbitrage, and
Investment.

(1) *Facile princeps* stands trade. The necessity of transmitting money from one country to another may originate in innumerable ways, but the most potent and most constant cause is ordinary trade. Exporters in other lands are for ever drawing on London against their sales to us of food and raw material ; and importers are for ever purchasing and remitting such bills to pay for the manufactured goods that they buy from us.

The influence on the exchanges of the balance of trade is, however, an unknown quantity ; for, though the values of both imports and exports are declared at the Custom House, the length of credit given by the seller,¹ the varying conditions on which goods are

¹ England gives credit to all the world, but takes little or none. For the goods which he is exporting this spring, the British shipper may only receive payment in the autumn, or next spring. The foreign exporter, on the other hand, draws against his bill of lading, and almost from the day the goods enter our warehouses, or very shortly after, our merchants are in cash advance upon them, and continue to be so until they are finally sold and paid for. Consequently, the relative amount of our imports and exports at any particular moment is far from representing the exact relative amount of the payments to be made and received.

shipped, the inexactness of the declarations, and other causes, render it, practically speaking, impossible to draw any reliable inference from the Board of Trade Returns.

(2) Immediately connected with trade is freight—an item that may be reckoned as almost entirely in our favour. It represents the earnings of our enormous fleet of steam and sailing vessels, which perform the greater part of the world's carrying trade. In the case of imports, freight forms part of the cost and is ultimately borne by the home consumer; but on exports it is paid by the foreign consumer. Whether, in the latter instance, the shipowner receives his money here or abroad makes no difference, for if paid on this side the exporter adds it to the value of his shipment and the buyer has to remit so much the more.

Under this head may also be included the commissions and brokerages, &c., amounting in the aggregate to a very important sum, charged to their foreign clients by the great army of accepting-bankers, foreign loan agents, stock- and produce-brokers, shipping-merchants, agents, &c.

(3) Stock-exchange business frequently affects rates, especially those of Paris and New York. If Paris has been buying Rio Tintos or Spanish over here, the demand for cheques to pay with will send up the exchange on the eve of settling-day. So with New York: if investors here take a fancy for American

Rails, Capel Court keeps up the supply by ordering from Wall Street, and the paper drawn by Wall Street against our purchases depresses the exchange.

(4) Next come loans. Lombard Street is the world's loan-office, and "Money lent without Security" its motto. Out of its annual savings, England can afford to lay out about 120,000,000*l.* to 150,000,000*l.* a year in investments of one sort or another: and foreign communities, suffering from chronic impecuniosity, take it in turns to try and raise money here on their promises to pay. If they succeed, bills are drawn on the loan-agents, and the exchange falls. In the opinion of many foreign finance-ministers, and of their advisers, the simplest method of correcting an adverse exchange is not, as might be supposed, to economize by reducing Government expenditure, but to raise a fresh loan; in other words, when a State finds it over-difficult to pay interest on what it has already borrowed, it borrows more.

Foreign municipalities, railway companies, harbour boards, &c., also come here for money, and all such loans tend, at the time of issue, to turn the exchange against us.

On the other hand, the interest that has to be remitted hither on the hundreds of millions already lent is a permanent factor in our favour, the effect of which is most noticeable when preparation is being made to meet the half-yearly coupons in London, especially those due in January and July.

(5) *Crédits* have been divided into three sub-heads.

By "Documentary" are meant those issued by continental buyers in favour of extra-European exporters. In America and the East, bills on London will at all times command a better price than bills drawn on continental bankers, because there is more demand for them : so that, if Germany orders cotton, for instance, it pays better to let the sender draw on London for German account, than to have him draw direct. The effect of such transactions is to incline the Eastern and American exchanges against us, and the German for us.

There are numerous cases, too, of countries trading together between which there exists no exchange. If a New York merchant orders a shipment of currants from the Ionian Islands, it would manifestly be of no use to ask the exporter to draw on him ; and what he does, of course, is to open a documentary credit in London in favour of the shipper. London, in fact, is the international clearing-house and pay-office.

Travellers' credits may appear to be an item of very slight importance ; but in the tourist season, from July to October, its effect is far from being insignificant, remittances from Switzerland, Italy, the South of France, the Tyrol, &c., being then largely made up of drafts against Circular Letters of Credit.

In his account of the operations for the payment of the Prussian indemnity, M. Léon Say estimated the amount spent yearly in France by visitors at 16,000,000*l.*;¹

¹ See *Economist*, Feb. 9, 1878.

and in 1889, the year of the Paris exhibition, the large gain of three hundred million francs exhibited by the gold reserve of the Bank of France was attributed in great part to the coin brought into the country by tourists.

Italy also benefits from the same cause, as the following extract from a recent Foreign Office Report¹ will show :—

“It has often been a matter of interesting speculation to ascertain how, in the present depressed state of finance, it has been possible for Italy to find gold for the payment of the difference between her imports and her exports during many years past without a serious rise in the exchange with foreign countries, the rate of which has been, up to quite recently, but little in excess of that of a wealthy country like France. These differences amount this year to about 10,000,000*l.* as against some 17,000,000*l.* in 1890. To this fluctuating liability must be added the necessity for paying in gold the interest on that portion of the Public Debt held out of this country, which may be roughly assessed at another 10,000,000*l.* annually. Italy has no gold mines, nor any visible means from which such large sums can have been drawn, without issuing large amounts of stock to an extent which would necessarily have depreciated their value far more than has been the case.

“The only conclusion at which it is logically possible to arrive is that this amount of gold is annually brought

¹ No. 1008. Report for the year 1891 on the Foreign Trade of Italy.

into the country by foreign travellers who swarm during the four seasons of the year in one part of Italy or the other. From careful calculations made by the United States consular representatives in various parts of this country, it has been computed that for the last 10 years the average annual expenditure in Italy of American citizens has been 35,000,000 dols. (7,000,000*l.*). It would scarcely be an exaggeration to place the collective expenditure of British, French, Austrian, German, and other foreign travellers at double this amount, which result would bring in round numbers at least 21,000,000*l.* in foreign gold annually into the country.”¹

✓ The third division is that of blank credits, given either to merchants, to bankers, or to exporters. As regards the former, London accepting-bankers are in the habit of granting accommodation to merchants abroad, who are of good standing and reputation, and who are able to make advantageous use of additional capital in the

¹ The writer of the Report appears to base his argument on the supposition that money spent in a country by foreigners must mean the importation of so much actual coin—which is, of course, a mistake. It need hardly be said that the traveller usually brings a letter of credit in his pocket, not a bag of gold, and that, when short of cash, he draws a bill on London and negotiates it with a banker. As the bill is payable in, and represents, gold (the banker can have sovereigns for it, if he likes, by sending it to his London correspondent with instructions to that effect), the offer of it for sale operates on the exchange and on the gold-premium precisely the same as though the drawer had taken a handful of sovereigns to the bank and changed them into Italian notes.

conduct of their business. Such transactions, however, only act upon the exchange when the credit is first opened, or when it is withdrawn, as on each occasion of ordinary renewal, the merchant buys a remittance in cover, and simultaneously issues a re-draft, so that the one operation cancels the effect of the other.

Owing to the wealth and high position of most of the accepting houses, bills of this class rank with the best—though, strictly speaking, they are nothing but accommodation paper.

Bills drawn in blank by bankers admit of a different explanation. These are created in connection with exchange operations. In all agricultural countries the great bulk of the export business is concentrated on the harvest season. At this time of the year, therefore, bills on London are plentiful and cheap, while during the remainder of the twelvemonth they are more or less scarce and dear. Under these circumstances the local banks can earn a safe and legitimate profit by “bearing” London paper in the dear season, and by reversing the operation in the cheap season: that is to say, when the price is high they draw heavily on London and run up a big debit-balance over here, and when the price is low, they buy enough to pay off their debt, and to leave a balance on the opposite side of the account.

Exporters' credits are of the same nature. Instead of drawing against his shipment when the market is full of similar paper, the exporter arranges, if possible,

to draw a month or two in advance, in order to take advantage of the high rates ruling before harvest.

As a matter of course, the item of "Credits" also appears under the head of demand, because the money drawn from us in this shape has nearly all to be paid back.

(6) Under "Arbitrage" are to be understood those operations, whether of buying or selling, by which advantage is taken of any temporary difference between the exchange quotation at one place and its counterpart at another; and, as exchange dealers abroad frequently buy for the rise and sell for the fall, "speculation" may here be added.

(7) Our last item—the demand for "investment" purposes on the part of continental bankers—is one that calls for particular attention, for though the exchanges that are subject to its influence are few in number, those few are the chief exchanges of Europe. From the fact, too, of its being the only element of demand in which the association of antecedent and consequent is plainly traceable, it is also the most interesting, and will be best dealt with in a separate chapter.

XIV

THE CONTINENTAL INVESTMENT-DEMAND FOR LONDON PAPER

The functions of a banker.—Distinctive qualifications of a banking security.—Bills of exchange as investments.—Continental bankers buy those that yield the best return.—If the London market-rate rises above the Continental level, bills on London are sought after abroad and the price rises.—The lower the price, the sooner it is affected by a difference in discount-rates.—There is no necessary ratio between an advance of the discount-rate and a consequent advance of the sight-exchange.

A BANKER has been defined as a man who takes care of other men's money, and lets them have it when they want it.

His function, all the world over, is to borrow from those who possess more money than they can employ, and to lend to others who can employ more than they possess: and the vital condition of his business is to lend in such manner, and *on such securities*, as will enable him to keep the promise he has made to repay whenever asked.

Certainty of repayment without loss at a specified and not distant date, combined with the capability of

immediate conversion into cash, if need be, is the distinctive qualification of a theoretically perfect interest-bearing banking security. A Treasury Bill attains perfection, and a first-class bank-bill closely approaches it. Good bills of exchange, in fact, satisfy nearly every requisite, as they are rendered safe by the joint liability of drawer, acceptor, and endorsers, are paid punctually to the day, and are paid at par.¹

All bankers therefore are regular buyers of bills; but while the London banker confines his choice solely to London paper, his more cosmopolitan colleague on the Continent shows himself less fastidious in that respect, and holds large amounts of foreign, as well as home, acceptances. Whether the conservatism of the London banker is altogether justifiable, is a question that it may be useless to discuss; but it may be remarked in passing that, regarded merely as an investment, a good Berlin acceptance, when it can be bought at 20.50 plus interest, certainly appears more attractive than an English acceptance yielding the same rate of interest, especially if the former is backed up by a first-class London endorsement, as is the case with most of the foreign bills sold on 'Change. It may be added, too,

¹ Their only fault is that they are not saleable. There being an unwritten law in this country that the banker shall not hawk the bills he holds about the market, that is to say, that he shall not re-discount, they lack the attribute of convertibility, and can only be turned into cash in case of great emergency and at the risk of a serious loss of prestige.

that there is no loss of prestige incurred in re-selling a foreign bill.¹

Other things being equal, the continental banker naturally gives the preference to bills on that country where discount stands highest, in order to profit by the better return they give; and, consequently, if the London market-rate rises higher than the market-rate of Berlin, or of Paris, or Amsterdam, or Antwerp, etc., the bankers in those places at once begin buying London paper, and the price rises. The mere fact that *bank-rate* stands higher here than abroad counts for very little, because, as was pointed out, the seller of a first-class bill allows interest to the buyer only at the *market-rate* of the place upon which it is drawn; and, of course, it is only first-class paper that a banker cares to buy for investment. If such is not to be had at home in sufficient quantity, he orders what he wants through his London correspondent, who gives it out of his own bill-case if he has sufficient, or, if not, buys it from the bill-brokers. The usual method of covering the transaction is to remit ordinary trade-bills, as far as possible, and to make up the difference by instructing the London correspondent to draw and sell

¹ The frequency with which the best London paper changes hands on the Continent is very noticeable, it being no unusual thing to find that the endorsements, after entirely covering the back, have overflowed on to an "allonge," which has had to be attached to accommodate them. If a London banker is in want of cash to meet payments, he calls in part of his deposits with the brokers; if a Paris or Berlin banker needs it, he sells a parcel of his foreign paper.

a cheque, thus acting on the exchange from this side as well.

It does not follow because a Berlin banker buys a London bill with 3% interest allowed, that he is sure to net 3%, any more than a London banker can be sure of making $2\frac{3}{4}\%$ on his money by buying Consols to-day, and selling them two months hence with accrued interest. In either case the price may rise or fall in the interim, increasing the yield or diminishing it. As a consequence, an advance of the London market-rate proves far more attractive when bills are cheap, and have plenty of room to rise, than when they are already high.

To render this more intelligible, let us say that on a given date cheques on London stand at 20.40 (Berlin quotes 8-days London, not cheques—but let that pass), market-rate on both sides at 2%, and long London at 20.40 less 3 months at 2% (= 20.30). Market-rate in London now hardens to $2\frac{1}{2}\%$, and the long rate is accordingly adjusted to 20.40, less 3 months at $2\frac{1}{2}\%$ (= 20.27); but, as the discount margin is sufficient to induce purchases, the enhanced demand may cause an advance of, say, 1 per mille, to 20.42 less $2\frac{1}{2}\%$ (= 20.29), while, if discount here continues to rise, and goes to 3% or $3\frac{1}{2}\%$, we may see the exchange gain several points.

Let us put it at 20.46, less 3% (= 20.31). Now, if a Berlin banker buys £1,000 on London at this price, paying M.20,460, minus 3% p.a., and keeps it until it

is due, it is evident that, if he is to make exactly 3% on his investment, the sight-exchange at which he sells must again stand at 20.46, and that every point that it may have fallen in the meantime will reduce the return. At 20.41, for instance, the bill would only yield $\frac{1}{2}\%$ for the three months ($20.41 - 20.31 = 10$ pf. = $\frac{1}{2}\%$), or 2% per annum. As the usual range of the short rate is from 20.35 to 20.50, it is clear, therefore, that the nearer he goes to 20.50 in buying, the greater is the danger of a relapse in the rate, and of a consequent loss on realization: so that, as was said, whilst a small difference in discount may serve to raise a low rate of exchange, it takes a considerable difference to push up a high rate.

It is necessary to guard against the mistake, which it is easy to fall into, of supposing that there is any arithmetical relationship between an increase in the discount-margin and a rise of the sight-exchange. Because a discount-difference of $\frac{1}{2}\%$ causes a rise of two points on one occasion, it need not cause it on another, nor need a difference of 1% produce a rise of four points. There exists no necessary ratio whatever. The buying for investment is strong or weak according to the outlook of the money-market at home and abroad, and according to the state of credit, etc.—in a word, if bankers think the operation likely to turn out well, they buy freely, and the exchange goes up; but if they think it likely to turn out badly, they leave it alone, and the exchange remains unaffected.

XV

THE CONTINENTAL INVESTMENT-DEMAND FOR LONDON PAPER—(*Continued*)

Owing to the want of necessary data it is in most cases impossible to ascertain the specific cause of exchange-movements,—But in the case of the investment-demand cause and effect are intimately associated.—A comparison between the movements of the principal short exchanges in 1890, and those of the respective discount-differences.—How the principle is illustrated by the usage of sending “Firsts for Acceptance” to London.—Without good credit there can be no investment-demand.—How and why a ten-per-cent Bank Rate in 1866 sent the French exchange down instead of up.

IF it be the fact, as suggested, that bankers on the Continent begin buying up London paper as soon as the interest obtainable upon it exceeds the rate to be earned on native acceptances, it stands to reason that, immediately such conditions obtain, its price ought to rise; and if it can be demonstrated that the price actually does rise when the London discount-rate advances, the confirmation thereby afforded will go far to prove that the theory is correct.

Every element of demand must at times exert some influence on the exchange, but in the majority of

instances the evidence is wanting which would enable us to say that this or that, and not the other, is the principal cause of a given movement. To compare, for example, the course of the Paris exchange with the published statistics of our trade with France would, for many reasons, be labour in vain; a foreign loan may have been "taken firm" and paid for months, or even years, before its introduction to the public; the business in securities is nobody's business but theirs who engage in it; the sum total of tourist-expenditure, or of the foreign credits granted by London bankers, is an unknown quantity; and so on of the other factors. About all these agencies we are quite in the dark.

But with the demand for investment-purposes the case is different. Not only are the necessary data public property, but cause and effect are so intimately associated that the connection is unmistakeable. A glance at the *Times* or the *Economist* shows us the course and tendency of the respective market-rates, and as the difference between them inclines the one way or the other, so we expect the exchange to rise or fall; and, in nine cases out of ten, on turning to the Course of Exchange the fulfilment of our expectation stares us in the face. Thus, let us suppose that a week ago the quotations were:

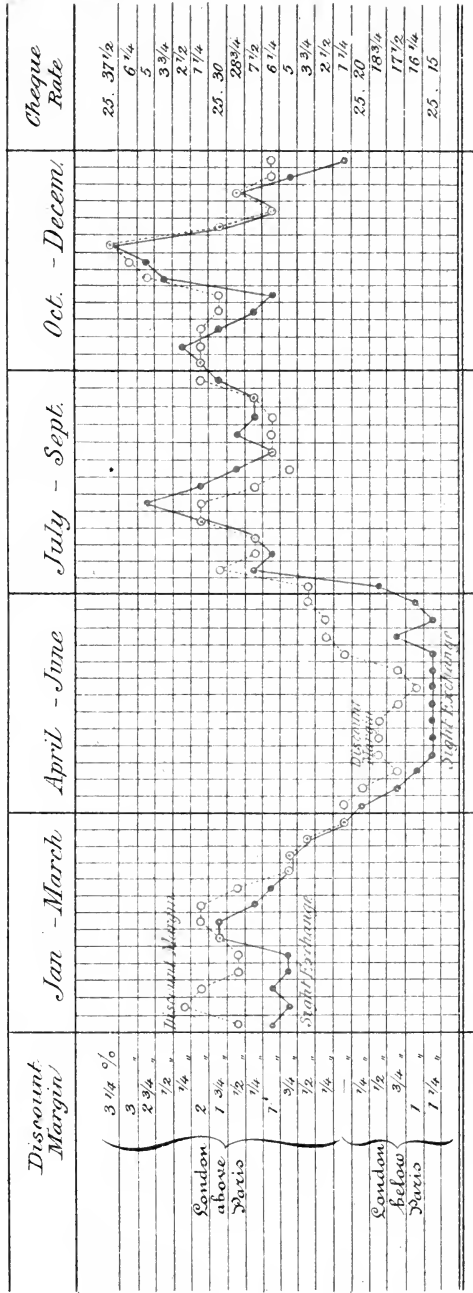
London market-rate	$3\frac{3}{8}\%$	} London $\frac{1}{2}\%$ above Paris
Paris „	$2\frac{7}{8}\%$	
Sight-rate on London in Paris	25.19 ¹	

¹ July 4, 1890.



1890

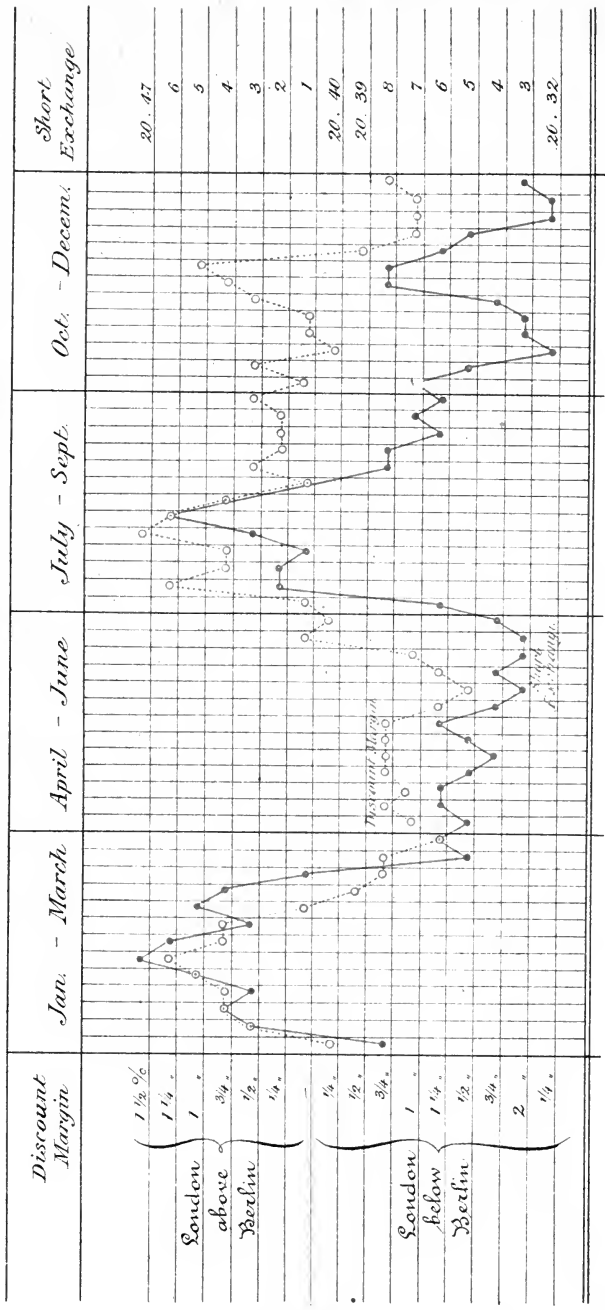
1. The difference between the Market-rates of discount in London and Paris compared with the price in Paris of Cheques on London





1890

2. The difference between the Market-rates of discount in London and Berlin compared with the Short Exchange on London in Berlin



but that London has since gone up to $4\frac{1}{4}\%$, and Paris gone down to $2\frac{1}{2}\%$, increasing the difference to $1\frac{3}{4}\%$: are we to infer that the exchange should have fallen or have risen, and need we be surprised to find it marked 25.27 ? ¹

In the adjoined diagrams a practical exemplification of this principle is furnished in the shape of a comparison between the movements of the French and German rates in 1890, and those of the respective discount-differences, and when it is borne in mind that exchange-fluctuations are the effect of many causes, while only one such cause is dealt with, it may be fairly claimed that the general truth of the law is placed beyond doubt.

Bills themselves also bear witness to it. Every one conversant with banking practice is acquainted with the usage of sending the First of a bill to London for acceptance (in order to facilitate the negotiation of the Second, an accepted bill selling better than one not accepted) and of requesting that it be held until claimed by the possessor of the duly endorsed Second. If the Continental holder of the Second should keep it back—and that he does keep it back awhile is the rule, not the exception—it must be for one of two reasons: either for the sake of the interest it returns him, or in expectation of an improvement in price. Accordingly, when discount stands higher in London than abroad, it will be found that, as a general rule, the First is not

¹ July 11, 1890.

claimed until it is nearly due, because the Second has been retained until the last moment; and, on the other hand, that if discount here falls below the foreign level, an immediate increase is perceptible in the number of Firsts that come forward.¹ It is noticeable, too, that "Firsts for acceptance" are rarely sent from those countries where interest mostly rules high (except when the Second has been remitted elsewhere, and the First comes direct simply to save time), but that the bill is usually endorsed and remitted hither at once. New York, for instance, sends very few; and it may be taken for granted that American bankers can generally employ their money to better advantage than by putting it into London bills, and have therefore no inducement to hold back their purchases as an investment.²

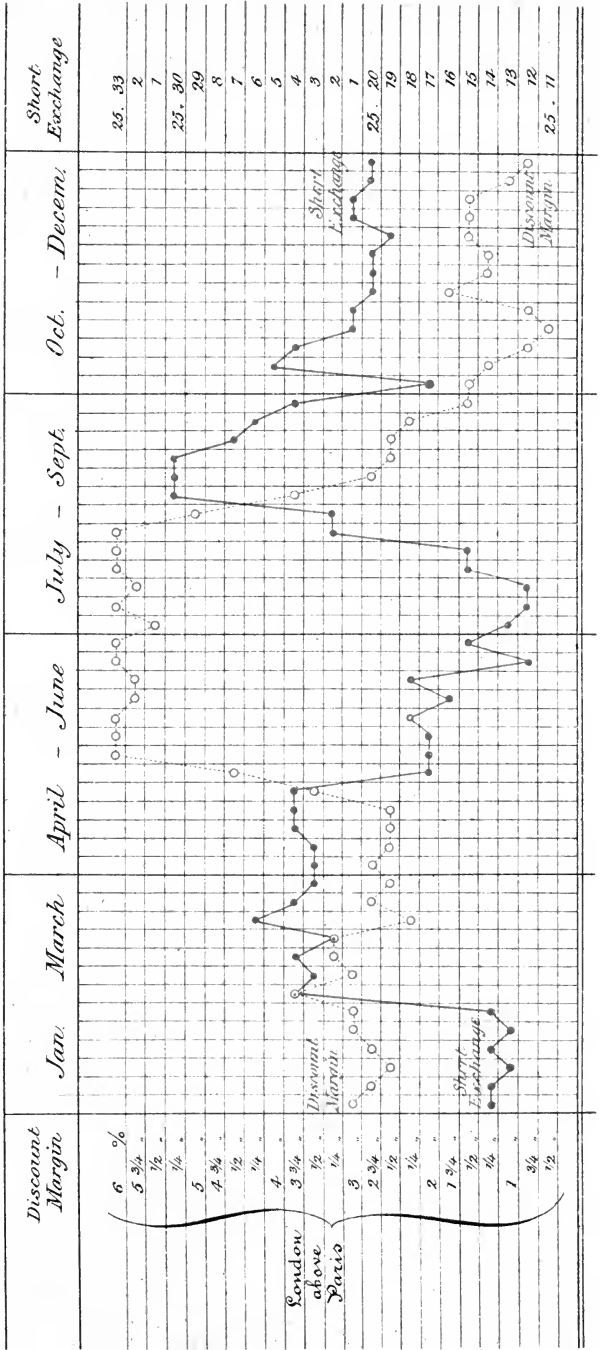
In the latter part of 1890, the year to which the diagrams apply, London narrowly escaped a tremendous panic, which was averted by the skilful management of the Governor of the Bank of England, and it is surprising to observe how efficiently the measures taken to save the situation preserved our credit abroad from injury. There is absolutely nothing in the course of either the Paris or the Berlin exchange to show that anything unusual happened here in November: and even the long rate maintained its position, the quotation

¹ These are points that of course can only be verified by those who have special opportunity for observation.

² It happens occasionally that they keep some for a short time, but probably more as a speculation than as an investment.



3. The difference between the Market rates of discount in London and Paris in 1866 compared with the Short Exchange on London in Paris



in Berlin on 20th November having been 20.38½ for eight days' paper and 20.10 for three months' paper, which, with discount in London at 6½ per cent., was just about the normal variation. It need hardly be said that if our credit had been seriously impaired the result would have been very different.

Without good credit—without a general belief that the average acceptor of ordinary commercial paper is good for the amount, and will punctually meet his engagements—there can be no investment-demand. Continental bankers do not, for obvious reasons, send capital to Constantinople for investment in native bills, nor would they put it into English bills unless they felt absolutely sure of getting it back. No better proof—if proof be needed—can be put forward of the truth of this proposition than the course of the Paris exchange in 1866, which was the last occasion of an actual crisis in London. The Paris rate on London is still the leading exchange, but at that time it stood indisputably first, and may be accepted as representative of the then state of continental opinion. For full three months, as the diagram shows, there was a discount-margin of no less than six per cent. between London and Paris, and yet the exchange, instead of rising, fell as far as it was possible for it to fall. For full three months continental bankers could have bought the best London acceptances at a price which would have returned them nine or ten per cent., and yet, so low had our credit fallen that they preferred to employ their money at home at three or

four per cent. We tried to explain away their suspicions; but in vain. Lord Clarendon, who was then in charge of the Foreign Office, went to the length of issuing a circular to all our representatives abroad, in which they were instructed to make known to the Governments to which they were accredited, and to the banking-interest generally, that "Her Majesty's Government have no reason to apprehend that there is any general want of soundness in the ordinary trade of this country which can give reasonable ground for anxiety or alarm either in this country or abroad." Nevertheless, continental bankers persisted in believing that there *was* reasonable ground for anxiety, and declined to trust us with their money.

It is probable that there were two main reasons for their mistrust. In the first place, they did not understand what was meant by the suspension of the Bank Act (which is not to be wondered at, seeing that there are plenty of business men even in London who would find it difficult to say just what it means). They thought, of course, that it implied a suspension of cash payments, or what it has now become the euphuistic fashion to call a "moratorium." And when reassured on this point there was still another difficulty. "It is all very well," they objected, "to say there is no reasonable ground for alarm; but, if so, then why do the Directors of the Bank of England, who must be far better judges of the situation than Her Majesty's Government, exact such an exaggerated charge for their

advances ? Surely, first-class London acceptances ought to be good enough to lend on at less than ten per cent. ! If not, depend upon it, there must be some mysterious peril still hidden away in the background ; and, unless we want to burn our fingers, we had better leave London paper alone."

And they did leave it alone. The very magnitude, in fact, of the inducement held out to attract foreign capital, had the opposite effect of scaring it away ; and *immediately the Bank saw its mistake*, and gave proof of its own returning confidence by reducing the rate, *the exchange recovered*.

XVI

THE CONTINENTAL INVESTMENT-DEMAND FOR LONDON PAPER—(*continued*)

How and why a reduction of the discount-margin immediately sends the Continental exchanges down.

HAVING seen what happens when, owing either to a rise in discount here or to a fall abroad, the return yielded by an investment in London paper exhibits an increased advantage over the rate produced by home bills, let us now consider what will occur in the opposite event of discount declining on this side or advancing on the other.

Naturally, the buying to keep will at once slacken; and, if the margin disappears, will cease altogether. With its cessation, too, the rise in price will also come to an end.

But that is not all. The exchange not only stops rising, but it immediately begins to fall, and falls rapidly. This proves that bills are being pressed for sale, as the decline of price, if occasioned solely by want of support, would be slow and gradual; and, as it is not plainly evident why a reduction in the London discount-rate

should render continental bankers so solicitous to dispose of their London paper as to force down the price, we are put upon our enquiry to account for this anxiety to sell.

It is simply a question of securing a quick profit, and will be readily understood if the following illustration be examined :—

Suppose that Germany employed the English system of currency, and that, on a certain day, when discount here stands at 4% , Berlin quotes cheques on London (assuming the existence, for simplicity's sake, of a cheque-rate) at "par," and three months' bills on London at "par, less 4% ," the price of a bill for 100*l.* being 99*l.* net. On the following day discount falls here to 3% , and Berlin, while still quoting cheques at "par," now gives long as "par, less 3% ," so that a bill for 100*l.* costs 99*l.* 5*s.* Consequently, those who bought yesterday at 99*l.* can make an instant profit of $\frac{1}{4}\%$, either by selling the bill at 99*l.* 5*s.*, or by remitting it to London for discount at 3% , and selling a cheque thereagainst at par.

The eagerness to realise is thus amply accounted for, and the only question is : what sacrifice will the average holder submit to in order to sell? This is purely a matter of surmise ; but if we assume that he surrenders half his profit to secure a buyer, the price will fall to

Cheques, $\frac{1}{8}\%$ dis. ; long, $\frac{1}{8}\%$ dis.— 3% ,

and if he surrenders all (as he may, if discount is rising

in Berlin, or if he thinks he can do better with his money in something else) to

Cheques, $\frac{1}{4}\%$ dis. ; long, $\frac{1}{4}\%$ dis.— 3% .

This is the natural and intelligible way of quoting exchanges, and is what we may expect when the Utopia of a universal currency is attained. But, as we have to deal with things as they are, we must now translate the figures into German currency, and merge the discount-difference into the current price of a pound, as expressed in German money.

The original price was—

Cheques, at par = 20.43 ; long, at par, less 4% = 20.23
and after the drop in the London discount-rate it becomes nominally :—

Cheques, at par = 20.43 ; long, at par, less 3% = 20.28 ;
but if the seller gives up half his profit, the actual rate that business is done at will be—

Cheques, $\frac{1}{8}\%$ dis. = 20.40 $\frac{1}{2}$,

Long, $\frac{1}{8}\%$ dis.— 3% = 20.40 $\frac{1}{2}$ —15 = 20.25 $\frac{1}{2}$,

while if he gives it all we have—

Cheques, $\frac{1}{4}\%$ dis. = 20.38,

Long, $\frac{1}{4}\%$ dis. — 3% = 20.38—15 = 20.23,

the net result in this latter case being that long bills are restored to their *original quotation* of 20.23, but that the cheque-rate, *the actual exchange*, is marked *five points down*, from 20.43 to 20.38.

To show that this interpretation is based on facts, and has not been evolved from the writer's inner consciousness, here are particulars of the fall in the German exchange that occurred, as shown in the diagram, in the spring of 1890, and which may be verified by reference to the *Economist*:

1890.	Berlin on London.		London.	Berlin.
	8 days.	3 months.	Discount.	Discount.
27 Feb.	20.45	20.26	4	$3\frac{3}{4}$
13 Mar.	20.41	$20.26\frac{1}{2}$	3	$4\frac{3}{4}$
27 Mar.	$20.36\frac{1}{2}$	20.24	$2\frac{5}{8}$	$3\frac{7}{8}$

On the first-mentioned date the short-rate was at 20.45, and the long at (20.45, less 82 days at $4\frac{1}{2}\%$, &c. =) 20.26. The fall to $3\frac{1}{2}\%$ in London reduced the margin between short and long from 19 pf. to $14\frac{1}{2}$ pf., and altered the price, theoretically, to $20.45 - 20.30\frac{1}{2}$; but, as discount was going up in Berlin, holders were content to forego almost the whole of the profit, and the price fell 4 pf. to $20.41 - 20.26\frac{1}{2}$. Taking this price as a fresh basis, the renewed fall in London should have modified it to 20.41 short and $20.28\frac{1}{2}$ long, (20.41, less 82 days at $2\frac{5}{8}\%$), but the weakness of our market frightened holders into selling at an actual loss, and the exchange sank $4\frac{1}{2}$ pf. to $20.36\frac{1}{2} - 20.24$.

XVII

THE MONEY-MARKET AND THE GOLD-EXCHANGES

The Coinage Act 1870.—An engagement to pay money is an engagement to pay gold.—To bankers, who are under engagement to pay large sums at short notice, this fact is all-important.—All the clearing-bankers keep an account at the Bank of England.—A demand for gold, in whatever part of the country it may spring up, must fall on the Bank of England.—The amount of gold in circulation varies with the state of trade,—And the amount of notes with the state of credit.—Why other countries send to London for gold, and what they want it for.

IN order to avoid confusion, it has so far been assumed that the range of movement of every exchange is bounded by well-marked and unmistakable limits, defined as, on the one hand, the point at which bills on London become so expensive that the intending buyer would do better to remit gold, and, on the other, the point at which they become so cheap that the intending seller, instead of drawing, would do better (notwithstanding the expense of carriage) to ask his English debtor to send sovereigns. This latter extreme, the inferior limit, is always efficacious; for only under circumstances of the greatest urgency (such as peremptory expulsion, the outbreak of war, or revolution, etc.) would a merchant

abroad consent to sell his claim on London for less than the sovereigns themselves would fetch, minus charges. But the superior limit, that at which he is supposed to remit gold, is operative in only very few instances: the reason being that, in many countries, gold is only to be had at a premium, even if it is to be had at all.

We have still to ascertain, therefore, whether any definite limitation can be assigned to the adverse movement of an exchange in those cases where a specie-barrier does not exist; but it is expedient to defer the consideration of this question until the gold-exchanges are out of hand.

The matter which it is now proposed to bring under notice does not in strictness come within the scope of an enquiry into the theory and practice of the Foreign Exchanges, but it is so closely allied to and bound up with it that to entirely exclude it would be all but impossible. What is alluded to is the sympathetic connection known to exist between the price of loanable capital in the London market, and the general condition, favourable or otherwise, of the gold-exchanges. Already there has been occasion to make a passing reference to this connection. In defending the use of the term "unfavourable," as applied to a rate of exchange, it was argued that "dear money" is due to a high bank-rate, a high bank-rate to a low reserve, a low reserve to an outflow of gold, and an outflow of gold to an "unfavourable" exchange.

The process of which this is a synopsis it is now proposed

to trace out in detail, taking as starting-point the fourth section of The Coinage Act, 1870, which says that :—

4. A tender of payment of money, if made in coins which have been issued by the Mint in accordance with the provisions of this Act, and have not been called in by any proclamation made in pursuance of this Act, and have not become diminished in weight, by wear or otherwise, so as to be of less weight than the current weight, that is to say, than the weight (if any) specified as the least current weight in the first schedule to this Act, or less than such weight as may be declared by any proclamation made in pursuance of this Act, shall be a legal tender,—

In the case of gold coins for a payment of any amount :

In the case of silver coins for a payment of an amount not exceeding forty shillings, but for no greater amount :

In the case of bronze coins for a payment of an amount not exceeding one shilling, but for no greater amount.

Nothing in this Act shall prevent any paper currency which under any Act or otherwise is a legal tender from being a legal tender.

The paper currency referred to is the Bank of England note, which was declared legal tender in 1835. As the Bank, however, must put aside the exact equivalent in gold of every note created in excess of

the fixed fiduciary issue, the note to all intents and purposes is gold.

Every engagement contracting to pay money in this country is bound to be met, therefore, *if required*, in gold. Notwithstanding the fact that our current engagements always amount to many hundreds of millions, and that all the gold in the country would hardly suffice to effect a single day's settlements, the law says that every creditor may insist on being paid in sovereigns. Of course, if it were customary to exercise this right, trade operations on a large scale would be simply impossible, and business would have to come to a standstill. But there is a conventional understanding that the use of gold shall, as far as possible, be dispensed with. Cheques, which are infinitely more convenient than gold and notes, and which are safe enough for all practical purposes, constitute in ordinary times the actual currency of commerce. If you have to pay a man you give him a cheque; and, if he has to pay you, you take a cheque. Nevertheless, the all-important fact that gold or notes can always be called for must never be lost sight of, and especially not by those who are under liability to make heavy payments at short notice.

In this respect bankers stand pre-eminent. Their business is to trade with other people's money—to lend A's money to B; and such business is never safe unless a sufficient amount of cash be kept to satisfy the demands of depositors. It is out of the question to

suppose that bankers ought to be able to repay all, or even the greater part, of their deposits in cash. They cannot achieve impossibilities. Seeing that the total amount of customers' money held by them is estimated at nearly 700,000,000*l.*,¹ while the country's entire stock of legal money is believed not to exceed about 100,000,000*l.*, it is no slur upon them to say that they are not prepared to meet a run. The most they can do is to keep in hand a reasonable surplus over and above each day's anticipated outgoings. In addition, however, the whole of the clearing-bankers, and many others as well, keep a balance at the Bank of England: and on this seemingly insignificant fact hinges the entire connection between money and the exchanges.

Whenever the country branch-banks require more notes they write to the head-office; if the head-office wants more it applies to the London clearing-agent; if the clearing-banker wants more he sends across to the Bank. The effect is precisely the same as though every bank in the length and breadth of the country were a branch of the Bank of England, keeping just enough notes and coin to go on with, and sending up to head-quarters whenever it became necessary to increase the stock. Owing, therefore, to the fact of the Bank of England having opened an account for each of the clearing-bankers, force of circumstances compels it to keep up a store of legal-tender money for the requirements of the country at large.

¹ *Economist*, May 21st, 1892.

Such being the case, let us ask what the currency-requirements of the country are, and under what circumstances they may increase. As to the notes, they are nearly all in possession of the banks: but the gold is divided between bankers, shopkeepers, and the general public—the two former using it for till-money, and the latter for ordinary expenditure. The amount in circulation varies with the state of trade. If trade revives, many employers of labour work longer hours and take on more hands. Tens of thousands of operatives who were only taking, say, a pound or twenty-five shillings home on Saturday, now take an extra half-sovereign. Thousands of shopkeepers who only kept three or four pounds in the till, now keep six or seven, because they are doing more business. In short, more money is in actual use throughout the community, and the Bank of England has to make up the difference.

Loss of confidence, or failure of credit, also leads to the employment of more legal-tender. In time of panic many payments have to be effected by bank-note, instead of by cheque, because merchants refuse to take the cheque of any man whose solvency they have doubts about. At such times, too, fear of a "run" induces bankers to increase their till-money, and the two influences together tell heavily on the Reserve.

The gold movements that interest and concern us most, however, are those of foreign origin. Drains due to trade revival or panic are events of rare occurrence, but withdrawals for abroad are every-day matters.

London being a free market for gold, all who have need of it usually send their orders here for execution. The purposes for which it is required are various. It may be wanted as a basis for extended note-issues, as in the case of the exports to Brazil in 1889; for currency purposes, as in the case of the coin sometimes sent to Portugal or Egypt; as raw material for goldsmiths' or jewellers' work, as in the case of Indian purchases; or as a speculation, as in the case of some shipments in 1891 to the Argentine Republic.

Lastly, and this is the most important cause of all, it is sure to be taken from us whenever bills on London become so plentiful in any of the world's markets as to depress the exchange to specie point; and, what is more, it will continue to be so taken until the exchange rises.

XVIII

THE MONEY-MARKET AND THE GOLD-EXCHANGES—

(continued)

The effect of every efflux of gold is to reduce the Reserve.—Why a withdrawal of gold from the Issue Department diminishes the stock of notes held by the Banking Department.—A rise of Bank-rate pulls up the deposit-rate, and a rise of the deposit-rate pulls up market-rate.

WHATEVER the cause may be of an efflux of gold from the Bank of England, the outcome is always the same. The Reserve is reduced by the amount of the withdrawal; and, if the reduction is serious, the Bank advances its rate, in order to check the drain and to attract fresh supplies.

It is, of course, all one to the Bank whether a demand is for notes or for gold; but as the Reserve is shown in the Weekly Return to consist principally of notes, while the bulk of the gold stands at the credit of the Issue Department, thus:

ISSUE DEPARTMENT.

Notes ...	£38·8 millions.	Securities...	... £16·4 millions.
		Gold...	... 22·4 „
	<hr/> £38·8 „		<hr/> £38·8 „

BANKING DEPARTMENT.

Capital and Rest	£18 millions.	Gov. Securities ...	£11·7 millions.
Deposits	37·2 ,,	Other Securities ...	28·7 ,,
		Notes } “The ...	13·8 ,,
		Coin } Reserve”..	1 ,,
	<hr/> £55·2 ,,		<hr/> £55·2 ,,

it may not be clear to every one why a withdrawal of *gold* should affect the *note*-reserve of the Banking Department.

This is why. The Banking Department makes an invariable practice of depositing all its gold (with the exception of about a million of coin always kept for till-money) in the Issue Department, and of taking notes in exchange, because the latter are more convenient to handle. If such were not the case, the Return would present the following appearance:—

ISSUE DEPARTMENT.

Notes ...	£25 millions.	Securities... ..	£16·4 millions.
		Gold	8·6 ,,
	<hr/> £25 ,,		<hr/> £25 ,,

BANKING DEPARTMENT.

Capital and Rest	£18 millions.	Gov. Securities ...	£11·7 millions.
Deposits	37·2 ,,	Other Securities...	28·7 ,,
		Gold	14·8 ,,
	<hr/> £55·2 ,,		<hr/> £55·2 ,,

that is to say, the gold held by the Issue Department would be split into two parts, of which the larger would figure among the assets of the Banking Department, to which it really belongs.

When a depositor asks for gold, then, say for half a million, notes to that amount are taken from the Reserve and returned to the Issue Department, which cancels them and gives up the sovereigns that it holds thereagainst.

The effect on the balance-sheet of the Issue Department is to reduce each side by half a million—

ISSUE DEPARTMENT.

Notes ...	£38·3 millions.	Securities ...	£16·4 millions.
		Gold	21·9 „
	<u>£38·3</u> „		<u>£38·3</u> „

and, in the first instance, the like result is produced in the account of the Banking Department—

BANKING DEPARTMENT.

Capital and Rest...	£18 millions.	Gov. Securities ...	£11·7 millions.
Deposits	36·7 „	Other Securities ...	28·7 „
		Notes	13·3 „
		Coin	1 „
	<u>£54·7</u> „		<u>£54·7</u> „

but if, as would usually be the case, the market restores its balance to the former level by borrowing or discounting, the deficiency in the Reserve will be made up by an increase in the Other Securities, thus :—

BANKING DEPARTMENT.

Capital and Rest...	£18 millions.	Gov. Securities ...	£11·7 millions.
Deposits	37·2 „	Other Securities ...	29·2 „
		Notes	13·3 „
		Coin	1 „
	<u>£55·2</u> „		<u>£55·2</u> „

Observe that the assets are now the same in *quantity* as they were before the withdrawal, but are lower in *quality*, inasmuch as an amount of notes representing gold has been displaced by credit-instruments, so that the ability of the Bank to pay its depositors *in cash on demand* is to that extent diminished.

Every van-load of gold, therefore, that enters or leaves the well-known courtyard in Lothbury increases or decreases the Bank's power to meet its engagements in legal-tender money; and if the withdrawals are large, or if they appear likely to be persisted in, the Bank puts up its rate as a means both of damming the outflow and of turning the continental gold-exchanges in our favour. As is well known, bank-rate cannot rise without drawing up the market to a greater or less extent, and hence the direct and immediate result of an important efflux of gold is an all-round advance of the discount-charge.

The value of "money" being, however, like that of all other commodities, regulated by the ratio that supply bears to demand, an advance of bank-rate need not, on the face of it, affect the price charged by other dealers, any more than the fact of one big coal merchant adding a shilling a ton to his quotations need compel all other coal merchants to do the same. But between the Bank and the market there exists a bond of union in the shape of the deposit-rate. It is not their own money that bankers and brokers employ in the discount of bills, but their depositors'; and the

rate allowed on deposits is based on bank-rate, rising and falling with it. When bank-rate goes up, therefore, the market, having to pay more to A, from whom it borrows, recoups itself by charging more to B, to whom it lends. In other words, a rise of bank-rate pulls up the deposit-rate, and a rise of the deposit-rate pulls up market-rate.

XIX

THE MONEY-MARKET AND THE GOLD-EXCHANGES— (*continued*)

As the market has ample warning of the gold-shipments due to unfavourable exchanges, it is usually prepared for them.—The New York exchange in October, 1891, and the influence of its fluctuations on the London market-rate.—Why an advance of the discount-rate checks an outflow of gold.

RETURNING to the question of gold exports, there is an important distinction to be noted between the shipments made to order for a specific object, and those which result from the unfavourable course of the exchange. The former nearly always come as a surprise on the market, as it is usually impossible to know of them until they are announced by the Bank ; but the latter, being an outcome of conditions which are apparent to every one, can be seen approaching, so to say, and the market prepares itself for them in advance.

If it be the New York exchange, for instance, which threatens to relapse to specie-point, as is often the case

in the autumn, the market, it will be found, begins to watch it closely when it gets to about 4.84¹ (for cable transfers), and from that time responds to every fluctuation—stiffening as the exchange weakens, easing as it hardens. This sympathy is especially observable when floating money is growing scarce, and when the Other Deposits at the Bank are below the average, for there is then every probability that the curtailment of supply will lead to brokers having to repay some of their call-money, and, as they keep practically no reserve, this means that they will have to borrow from the Bank, which at such times usually makes a pretty stiff charge for short loans. Naturally, therefore, they have to be cautious how they increase their commitments; and their anxiety to borrow rather than lend finds practical expression in a higher charge for discounts and a higher allowance for deposits.

To facilitate the comprehension of the foregoing, we will take the course of the New York exchange in October, 1891, as an object-lesson, and read it in the

¹ “There is every probability that considerable shipments will soon have to be made to the United States” (Cable transfers 4.83 $\frac{3}{4}$).—*Economist*, Oct. 3, 1891.

“As it is practically certain that gold will continue to be withdrawn both for the United States and elsewhere” (Cable transfers 4.83 $\frac{3}{4}$).—*Economist*, Oct. 10, 1891.

“With the prospect before us of gold withdrawals for the United States” (Cable transfers 4.84).—*Economist*, Oct. 17, 1891.

“More gold will in all likelihood be taken hence for the United States” (Cable transfers 4.84).—*Economist*, Oct. 24, 1891.

light of a few extracts from the "money-article" of the *Times* :

1891.	60 days sight-rate on London.	Market-rate in London.
3rd Oct.	480	$2\frac{7}{8}\% - 3\%$

"The large withdrawal of gold expected in some quarters to-day has not taken place, from which it may be inferred that the New York exchange at 480 leaves too narrow a margin."

6th Oct.	479 $\frac{3}{4}$	$2\frac{7}{8}\% - 3\%$
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"A small amount of gold has been taken from the Bank of England for New York in consequence of a small decline in the exchange."

10th Oct.	479 $\frac{3}{4}$	$2\frac{7}{8}\%$
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"The demand for gold for New York continues strong . . . and as long as this state of things lasts the discount-rate for three months' bank paper is not likely to fall much below its present level."

16th Oct.	480 $\frac{3}{4}$	$2\frac{5}{8} - \frac{3}{4}\%$
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"A distinctly easier tendency is observable in the money-market to-day, and the discount-rates are all rather lower. . . . It is not expected that any more gold will be sent to the United States yet."

21st Oct.	480 $\frac{1}{2}$	$2\frac{3}{8} - \frac{1}{2}\%$
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"The fall in the discount-rate has apparently caused the drain to the United States to recommence."

27th Oct.	480 $\frac{1}{2}$	$2\frac{1}{2}\% - 2\frac{5}{8}\%$
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"The money-market opened with a rather firmer tendency, the rate for three months' bank-bills being quoted $2\frac{1}{2}\%$, at which rate most of the day's transactions were effected; but, in the afternoon, when it became known that a quarter of a million was being withdrawn from the Bank of England in American Eagles, $2\frac{3}{8}\%$ was generally asked, and even higher rates were quoted in some quarters."

From these comments (which are distinct evidence of the sympathy between discount and the exchange) we are led to infer that when the New York rate is on

the verge of specie-point, not only will a further relapse of the exchange bring about immediate withdrawals, but also, that a fall in the London discount quotation will produce the same result; and, as it has already been shown that a fall of discount here is usually attended by a decline of the continental gold-exchanges, it would be only natural to suppose that the American rate is subject to the same conditions. As a matter of fact, the true explanation rests on entirely different reasoning.

The actual exchange between New York and London is the cable-transfer rate; but the rate that a banker bases his calculations upon, when deciding whether to order gold over, is that for 60-days' sight paper, which is what he will remit in cover. Three factors, then, affect his calculation; namely, the price of gold in London, the price of a 60-day bill on London, and the rate of discount in London, and of these three the only one that admits of doubt is the latter, because although he knows what discount stands at to-day on the other side, he cannot be sure what it will stand at ten days hence, when his remittances are due there. As an uncertainty is what the banker dislikes above all things, he eliminates this element of doubt by "securing the rate," that is to say, by cabling his London correspondent to sell the bills "to arrive," deliverable, let us say, within a fortnight.

Let us now suppose that at $4.83\frac{3}{4}$ there is neither profit nor loss on moving gold, but that a fall of $\frac{1}{4}c$ would just suffice to turn the scale—



The 60-day exchange in New York stands at	4.80
and the London discount-company quote	
bills "to arrive" at, say, $3\frac{3}{4}\%$ (which is of	
course higher than the spot price)	$3\frac{3}{4}^1$
making the combined rate	<hr/> 4.83 $\frac{3}{4}$

so that, evidently, either a fall of the long exchange to $4.79\frac{3}{4}$, or a fall of the discount-charge to $3\frac{1}{2}\%$ will be enough to start the outflow.

It is obvious that, if the market can be made to follow the Bank, an upward movement of 1% in the official rate will be just as effectual in stopping an export to New York as though the exchange had suddenly risen a point. That the same measure also checks a drain to the Continent, by inducing bankers to buy up the over-supply of bills, we have already seen; and though in the case of shipments for special purposes a high bank-rate cannot prevent the execution of a positive order to send gold, yet that it acts as a deterrent in the giving of such orders is proved by the fact that shipments of this description are fewer in number when discount is dear than when it is cheap.

¹ It is worth noting why the loss of interest on a 60-day bill at $3\frac{3}{4}\%$ p. a. should be set down as just $3\frac{3}{4}$ cents. The method of calculation is a very rough-and-ready one, but is quite good enough for most purposes. It is simply this: if you add 3 days' grace and 10 days' course of post to the term of a 60-day bill, you get 73 days, which is exactly the fifth part of a year, and interest for the fifth part of a year on 480 cents is very nearly the same thing as interest for a whole year on 100 cents. Of course, a year's interest at $3\frac{3}{4}\%$ on 100 cents is $3\frac{3}{4}$ cents, and so on.

XX

THE MONEY-MARKET AND THE GOLD-EXCHANGES (continued)

How a bill-broker is affected by a rise of bank-rate.—Shipments of gold for special purposes cannot be foreseen.—The normal condition of most of the exchanges is favourable to England.—Favourable exchanges do not necessarily bring gold.—Where our gold imports come from.

IF regard be had to the circumstance that discount-brokers work almost entirely on borrowed capital, and that they employ the greater part of such loan-money in the discount of commercial paper, of which they are at all times large holders, the fact that a heavy export of gold should cause a flutter of excitement amongst them becomes quite intelligible without further explanation.

The effect from their point of view of a rise of bank-rate (if such should be the anticipated result of the outflow) amounts to this: that the cost of all the money they have borrowed at once increases, and that the value of the bills in which they have invested that money at once decreases. Assuming that a broker's

bills, taken one with another, have a little over six weeks, or say the eighth part of a year, to run (which is a fair average), the decrease, on a one-per-cent. rise, will amount to one-eighth per cent. on the total cash value of his bill-case. In other words, if he held a stock of 800,000*l.* and were forced to realize, it would make a difference to him of 1,000*l.* whether he realized before the rate had gone up, or after.

If a broker, then, should have taken in bills at the beginning of the week, with the intention of "running" them, and should have to re-discount on the Friday or Saturday, after bank-rate has gone up, he can only do so at a loss; and as the bankers who have to pay for the gold which is going out are sure to want back some of their call-money, the probabilities are that he will have to re-discount. There is every reason, therefore, why brokers and discount companies should keep a vigilant look-out for signs of an imminent outflow.

Unless they have special sources of information, they cannot, of course, possibly know that a banker in Buenos Ayres or Rio has ordered a shipment of sovereigns over for the purpose of speculating on the premium, or that the Russian Government has "called" some of its deposit-money and has asked to have it in gold. Withdrawals of this nature take the market unawares, and must be classed among the risks to which the business is subject—all profit and no loss not being the rule in the discount-market any more than in other branches of trade. But when we come to withdrawals that

result from the ordinary action of the exchanges, we are treading on firm ground. To know when such are drawing nigh, the broker has but to watch the course of rates, and if he is caught napping he has no one but himself to blame.

Naturally, therefore, when the French, or the German, or the American exchange is almost *down* to gold-point, the broker has to be cautious how he buys bills, and doubly cautious how he "runs" them; and, as a matter of course, he takes in sail by raising his rate. On the other hand, if the exchanges are nearly *up* to gold-point he tries to secure as many bills as he can, and the market-rate falls.

In the matter of withdrawals there is no necessity to keep watch on all points of the compass. Owing to the enormous amount that has to be remitted to this country from every quarter of the globe in payment of interest on money lent, and in payment of our exports, it is an extremely rare occurrence that the balance of indebtedness should be so largely against us as to call for settlement in hard cash. The normal condition of all the exchanges, with the exception of those specified above, and of India (which is always against us), is favourable to England, and, as a rule, it is only when a country raises a new loan here, or succeeds in shooting a load of its home-made railway or other securities on the London market, that the exchange veers round in its favour.

A remarkable instance of this description occurred in

1889, when the Brazilian exchange stood at or above par during nearly the whole year; but this case was very exceptional.

Though it may be taken as certain that a loss of gold must always result from the fact of any exchange whatsoever turning against us to the extent of the cost of transmitting metal, it does not follow that the converse holds true, and that favourable exchanges must necessarily bring gold. Some countries redeem their promise to pay in gold and some in silver; but the greater number refuse to redeem it at all.

*All nations of the Teutonic stock*¹ *pay in gold on demand*, and so also do France, Belgium and Switzerland; but Asia employs silver, and the rest of the world lies under the bane of inconvertible paper-money.

From only three capitals, in fact, can we expect to receive gold as a natural outcome of the exchange rising to specie-point: those three being Paris, Berlin and New York. The yellow metal also flows in from Australia,² the Cape,³ and India, but in these cases it is

¹ The Teutonic Stock is divided into two branches, the Gothic and the Scandinavian. Under the former are included Germany, Holland, and the English-speaking peoples; under the latter, Norway, Sweden, and Denmark.

² Until Australia had a mint of her own she sent us the raw material, gold dust, and we sent her the manufactured article, sovereigns; but now that she makes her own coin, the banks ship sovereigns when they have no other means of remitting, so that gold comes partly as a commodity and partly in balance of the exchanges.

³ It sometimes puzzles people to understand how it is that gold should be coming in from South Africa and at the same time being taken out of the Bank for shipment thither. The explanation is

sent, not altogether as money, but rather as a commodity, which goes to market like any other produce of their mines.

For exchange purposes, France, Belgium and Switzerland may be regarded as a unity, represented by Paris, while the Dutch, Scandinavian, Russian, and perhaps Austrian, exchanges may be considered as controlled from Berlin : that is to say, if bills on London become proportionately cheaper in Amsterdam or Stockholm than in Berlin, Berlin buys them, and if they become dearer, Berlin sells them. New York, of course, stands for the whole of North America.

simple. Sovereigns are wanted there as a circulating medium, and as there is no mint at the Cape, the coin must be shipped. When Australia found that the annual cost of importing coin was sufficient to keep a mint going, she asked permission to erect one, and South Africa may some day do likewise.

XXI

THE PARIS EXCHANGE

Par and gold-points.—The upper gold-point is only nominal.—Effect of the double standard.—The Bank of France and the gold premium.—Limit to the rise of the exchange.—The Paris Course of Exchange explained.

WITH Paris the mint-par of exchange, value for value in fine gold, is,

25.22 (strictly $25.22\frac{3}{10}$),

and the gold-points are 25.15 to 25.12 against us, and 25.32 nominally for us.

In no case ought the exchange to sink below 25.12 for a sovereign, because the sovereign itself, after paying all expenses of getting it over from London to Paris, would produce a better outturn: but the superior limit of 25.32 has frequently been exceeded.

The cause of the anomaly is the premium on gold charged by the Bank of France. In England, gold alone is a legal tender: but the monetary system of France being based on the double standard, either gold or silver may be tendered in payment of a debt, and the Bank of France is, therefore, at liberty to pay its

notes in five-franc silver pieces whenever it chooses. Its stock of metal is very large (at present over one hundred millions sterling), and is about half gold and half silver, the value per unit of the one to the other being taken at the ratio of 1 to $15\frac{1}{2}$, which is equivalent to a price for silver of $60\frac{7}{8}$ pence per ounce.

It is considered doubtful whether the statutes of the Bank of France would allow it to charge a premium on napoleons, as that would be tantamount to an admission, either that the silver had depreciated in value (which in theory is not recognized), or that the note itself was at a discount; but it can put any price it pleases on its bar-gold and foreign coin. In this respect the practice of the Bank of England presents an exact parallel, for though bound to pay out a certain number of grains of gold on presentation of a 5*l.* note, the Bank need only give them in the shape of sovereigns, and if the holder asks for them in the shape of bullion or of foreign coin, it can, and in the latter case invariably does, make him pay a trifling premium. But though the Bank of France cannot make a direct profit on its twenty-franc pieces, there is said to be an understanding that persons requiring them shall pay by discounting first-class paper at bank-rate, instead of by presenting notes for encashment, so that an indirect advantage accrues to it on parting with them.

When the exchanges are unfavorable, the usual course is to refuse payment of large sums in gold currency, and to put a premium, varying from one to six per

mille, on bars and foreign coin. To impose too high a premium would defeat the Bank's object, because if the exchange rises beyond 25.40 money-changers find it profitable to collect coin and export it; so that the country as a whole would be losing gold, even though the Bank retained its stock.

The upper limit of the exchange is therefore 25.32, plus the premium; but, if the premium be prohibitive, it is 25.32, plus the loss of weight on the best coin that can be collected, together with the cost of collecting it. In recent years the highest point touched has been 25.45.

The following is a Paris Course of Exchange:—

ESCOMPTE	Changes	A 3 mois		A courte échéance	
VALEURS SE NÉGOCIANT A TROIS MOIS					
3°/o	Hollande.....	206½	à 206¾	205¾	à 206¼ et 4°/o
4°/o	Allemagne	122½	„ 122¾	122¾	„ 122¾ „ 4°/o
4°/o	Madrid	431	„ 434	431	„ 434 „ 4°/o
4°/o	Barcelone	431	„ 434	431	„ 434 „ 4°/o
6°/o	Portugal	400	„ 420	400	„ 420 „ 4°/o
5°/o	Vienne.....	210½	„ 211½	210¾	„ 211¾ „ 4°/o
6½°/o	Petersbourg	240	„ 242	243	„ 245 „ 4°/o
VALEURS SE NÉGOCIANT A VUE					
3½°/o	Londres	25 18½	à 25 23½	25 13½	à 25 18½ à 3½°/o
	„ Chèque			25 15½	„ 25 20½
3°/o	Belgique	1½ P.	„ 1½ P.	1½ P.	„ 1½ P. „ 3°/o
4½°/o	Suisse	1½ P.	„ 1½ P.	1½ P.	„ 1½ P. „ 4½°/o
5½°/o	Italie (lires)	2½	„ 2½ P.	2½	„ 2½ P. „ 5½°/o
4°/o	New York	515	„ 520	516½	„ 521½ „ 4°/o
Escompte : Banque de France, 3°/o,—Avances, 3½.					

So far as compactness goes this is far superior to our London list, and, when once understood, is also clearer and conveys more information; but, at the same time,

it is not so clear as it might be, and needs a few words of explanation.

It divides the exchanges into two groups. In the former, comprising Holland, Germany, Spain, Portugal, Austria and Russia, the bill, whatever its term, is taken at the three months rate, and if shorter the difference of interest is charged to the buyer, just as in London; but instead of charging the difference at the rate prevailing abroad, (given in the first column,) it is the Paris custom to reckon it in all cases at the arbitrary rate of 4 %. As the buyer, however, ought actually to pay interest at the foreign rate, he gives a little more for short paper if the foreign rate is over 4 % and a little less if the foreign rate is under 4 %. This explains why short paper (*à courte échéance*) is quoted separately, and why in the case of Holland it is cheaper than full-term paper, while in the case of Petersburg and Vienna it is dearer. All the quotations are in francs for one hundred units of the foreign currency (except Spain, stated in francs for one hundred piastres).

In the second division, comprising London, Belgium, Switzerland, Italy and New York, the bill, whatever its term, is taken at the sight-exchange, and difference of interest allowed to the buyer at the foreign bank-rate. As the buyer, however, is usually able to discount on the other side at less than bank-rate, he in that case compensates the seller of a long bill by giving him a better price for it, and full-term paper is therefore quoted separately.

Cheques on London also have a separate quotation, which is higher than the sight-basis, because the buyer saves the English bill-stamp and the loss of three days grace.

Belgium, Switzerland and Italy, having the same currency as France, are quoted at so much per cent. discount (p. = perte).

XXII

THE BERLIN EXCHANGE

Par and gold-points.—How the Reichsbank encourages imports of gold ;—And how it hinders exports.—The Berlin Course of Exchange.

THE Berlin mint-par is 20.43, and the gold-points are
20.51 to 20.53 for us,
20.34 „ 20.32 against us.

Germany, like ourselves, has the single gold standard (practically) and notes to any amount are paid in gold coin on presentation at the Head Office of the Reichsbank in Berlin.

It is noticeable, however, that the upper specie-point is not nearly so effective as the lower ; and that Germany, though quick to draw gold from us, is slow to let it out again.

As to imports, the Reichsbank accelerates them by the simple and legitimate expedient of paying a better rate for foreign gold coin than the tariff-price of other State-banks, and, in addition, by sometimes bearing the few days' loss of interest incurred in bringing the gold over. To circumvent exporters is doubtless a task of somewhat greater difficulty, but apparently not beyond accomplishment. In the first place the Bank imme-

diately parries the demand by putting up its rate, and secondly, in order to gain delay until the increased rate has had time to act, gives the big banking-houses to understand, so it is said, that there are sometimes higher issues to be considered than mere profit, even in business matters, and that to weaken the national reserve for the sake of gaining a paltry half per mille or so will be regarded by it as an unfriendly and unpatriotic action. As the State bank is powerful for good or evil, there are few bankers in Germany who would care to run the risk of offending it, and hence its wishes are usually respected.

Subjoined is a Berlin Course of Exchange :—

WECHSEL.	Not. vom 29. Decbr.		30. Decbr.
Amsterdam .....100 fl.	8 T.	168·10 b.	
do. do.	2 Mt.	167·65 b.	
Brüssel und Antw.....100 fr.	8 T.	80·55 b. B.	
do. do.	2 Mt.	80·25 b.	
Skandinav. Plätze...100 Kr.	10 T.	111·80 G.	
Kopenhagen .....100 Kr.	10 T.	111·80 b.	
London .....1 Lstrl.	8 T.	20·305 b.	
do. do.	3 Mt.	20·22 b.	
Lissabon, Oporto Milreis	14 T.	— —	
do. do.	3 Mt.	— —	
Madrid u. Barcel. 100 Pes.	14 T.	71·10 b.	
do. do.	2 Mt.	69·60 G.	
New-York.....100 Doll.	vista	418 b.	
Paris .....100 fr.	8 T.	80·65 b.	
do. do.	2 Mt.	80·40 b.	
Pesth östr. W.....100 fl.	8 T.	— —	— —
do. do.	2 Mt.	— —	— —
Wien östr. W.....100 fl.	8 T.	172 b.	172·35 b.
do. do.	2 Mt.	170·40 b.	170·75 b.
Schweizer Plätze.....100 fr.	10 T.	80·50 b.	— —
Italien. Plätze .....100 Lire	10 T.	78·55 G.	— —
do. do.	2 Mt.	78·15 b.	— —
Petersburg .....100 S.-R.	3 W.	197·50 b.	198 b.
do. do.	3 Mt.	195·40 b.	195·75 b.
Warschau.....100 S.-R.	8 T.	199·20 b.	199 G.

Bank-Disconto : Amsterd. 3, Berlin 4, (Lomb. 5, Privatdisc. $2\frac{1}{2}$ b.).
 Brüssel 3, London $3\frac{1}{2}$, Paris 3, Petersb. 6, Wien 5, Ital. Pl. $5\frac{1}{2}$, Schweiz 5.
 Skandinav. Plätze 5, Kopenhagen 5, Madrid 4, Lissabon 4.

which is so clear in its meaning that it is hardly possible to misunderstand it. The letters following the prices are to distinguish between buying and selling quotations (G=Geld=money: meaning buyers; B.=Brief=paper: meaning sellers), and to show the rates at which business has been actually done (b.=bezahlt = paid: meaning business done).

“Lomb. 5,” among the interest quotations, means Lombard Loans 5%. Lombard Loans are advances against Stock-Exchange Securities.

XXIII

THE NEW YORK EXCHANGE

Par and gold-points.—Is subject to fewer and less complex influences than the Continental rates.—In the autumn is usually against this country, but favours us during the rest of the year.—The fluctuations in 1891.

THE last of the three great gold-exchanges is that with New York, the par of which is

$$\$4.866 = £1 ; \text{ or, } 49\frac{5}{16}d. = \$1.$$

the gold points for and against us being respectively :

$$\text{about } \$4.89\frac{1}{2} = £1 ; \text{ or, } 49d. = \$1,$$

$$\text{about } \$4.83\frac{1}{2} = £1 ; \text{ or, } 49\frac{5}{8}d. = \$1.$$

The monetary system of the United States is a study in itself, but the main fact is that the Treasury pays out gold on demand, and imposes no impediment to an export ; which is all we need enquire.

In the case of the French and German exchanges, it was not attempted—beyond pointing out the magnetic influence of a high discount-rate—to supply any

special reason for the rise or fall, simply because, owing to the many-sided and complex nature of our business with the Continent, it is no more possible to account for the extent of the demand on a given day, or to say why money should be flowing on balance from Paris to London, instead of from London to Paris, than it would be to account for the quantity of traffic in Cheapside at one o'clock in the day, or to explain why more vehicles happened to be passing in the one direction than in the other. Our transactions are upon so gigantic a scale, and the power of single influences is so greatly modified, partly by anticipation and partly by counteracting agencies, that we may almost assert that no single cause (with the exception, as already said, of the demand for investment) is in itself capable of producing any serious effect upon the ordinary course of the exchange, and that all movements are due to an ever-varying combination of causes.

But in the case of the American exchange the forces in operation are fewer and less involved, and though it is never safe to lay too great weight on one particular influence, to the exclusion of all others, still there are certainly times when we can argue with some show of plausibility that this or the other is the dominant factor in raising or depressing the rate. It will be instructive therefore to examine the course of the rate for a year, and to see if we can suggest reasons for its fluctuations.

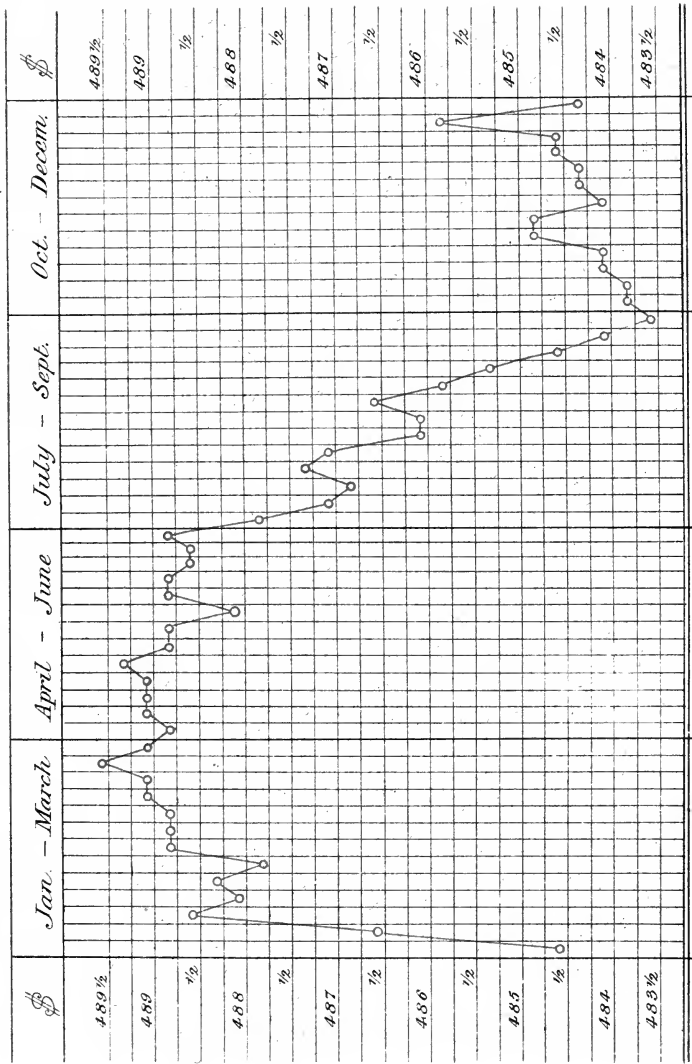
Owing to the magnitude of our imports from the

States, the creation of bills in connection with the shipments of corn and cotton &c. in the autumn is so great as to almost invariably turn the exchange against us from about August until December, but during the rest of the year it is mostly in our favour, and as a rule attains its maximum about April, that is to say, after the whole of the old crops have been paid for and before drafts have been offered in anticipation of the new. These features are present in the accompanying representation of the exchange in 1891, but in so exaggerated a form as to lead us to enquire whether any additional explanation can be put forward of the remarkable fact that the rate leaped up to the losing gold-point early in the year, remained there till midsummer, and then fell precipitately to the gold-gaining point, from which it stood at only a slight remove for the remainder of the twelvemonth.

The spring, it may be mentioned, was marked not only by an unusual demand for London paper but, still more, by an altogether exceptional scarcity. Some months previously London had caught the infection of the "silver-boom," and had purchased large blocks of stock in the hope that the increased supply of currency created by the new Silver Bill would lead to a great inflation of prices; but as that hope had been disappointed, and as the market here had had to contend first with the Argentine collapse and then with the semi-crisis of November, New York brokers were daily receiving heavy selling-orders from London, and had

1891.

4. The course of the exchange in New York for cable-transfers on London.





to remit enormous sums in settlement. This, added to the requirements of ordinary trade, which were unusually large owing to the imports that had been hurried into the country before the new tariff came into force, went a long way to explain the enhanced demand ; but the remarkable dearth of bills that prevailed was more difficult to interpret. It seems probable that there were two chief reasons: one being the fact that America, which had hitherto been a large exporter of silver, was under the new Act using up her current production, and the other being the probable withdrawal of banking accommodation occasioned by the difficulties into which the great commission business of the Barings had fallen—for there can be little doubt that American bankers must have been suddenly deprived of blank credits to a very large total, and that they would be unable to draw on London until they had concluded fresh arrangements here. However that may be, the fact remains that for upwards of four months America had to settle up with us in gold, and that the exchange only eased off when bills began to come forward in anticipation of the crops. With the advent of July, however, the situation completely changed. The largest harvest on record, combined with another “boom” in American Rails, caused such a glut of bills as to drive the exchange in a few weeks right over to the opposite specie-point. Then came our turn to liquidate in hard cash ; and by the end of the autumn a very large por-

tion of the gold received in the spring had recrossed the Atlantic.

The sudden advance noticeable about the middle of December may be ascribed with little hesitation to the demand for remittances to meet January dividends payable in London.

XXIV

THE SILVER EXCHANGES

The Indian currency system before and after 1835.—Value of the rupee.—The rate is always against us.—An easy way of finding the sight-exchange from the price of silver.—India Council Drafts.—The exchanges with China and Mexico.—The Mexican dollar.

THE leading silver-rate is that of India, which is quoted in pence for one silver rupee, the Indian currency-unit. Prior to 1835 a double standard was in force, the gold mohur and the silver rupee both being legal tender at fixed proportionate rates, just as the napoleon and the franc are at the present time in France ; but the chief, almost the only, currency medium was silver. In that year the Indian Government, in conformity with the modern, and what it held to be the more correct, currency-doctrine, determined to resort to a single standard ; and in so doing had practically no choice but to adopt silver. From that time therefore the silver rupee has been the only coin of legal tender ; and the gold coins of India have become mere tokens,

the value of which is affected by every change that takes place in the relative value of the two metals.

As the rupee contains 165 grains of fine silver, while an ounce of the standard metal contains 444 grains fine, the par with India is

1 rupee = $\frac{165}{444}$ of the price per ounce of standard silver.

This is of course a fluctuating par, and varies from day to day with the price of silver, with which it must necessarily keep step.

The rupee exchange is always against us. As India sells much more than she buys, there remains, even after deduction of the amount payable in Europe for interest on government and railway loans, for pensions to old servants, and for the costs attendant upon the government of India in this country, a considerable balance in her favour, which has to be remitted in specie, and hence the exchange-value of the rupee is, under existing circumstances, invariably higher than its intrinsic value. It stands in fact at or near specie point, which in the case of exports from this side is about $3\frac{1}{2}\%$ above par.

A useful and easily remembered formula for deducing the *approximate* sight-exchange from the price per ounce of standard silver is to *add $\frac{2}{8}$ of a penny to $\frac{2}{8}$ of the price*. At 44 pence this gives 1s. 4 $\frac{7}{8}$ d.; at 40 pence 1s. 3 $\frac{3}{8}$ d.; and so on. The actual rate being fixed by the equation of supply and demand, the rule is given only for what it is worth.

From 1873, when the action of the group of double-

standard countries, known as the Latin Union, broke the link that had hitherto subsisted between silver and gold, until 1890, when the United States began once more to legislate in favour of the white metal, the chief influence affecting the price of silver was the quantity of India Council drafts offered for sale. About a quarter of the total expenditure of India consists of payments in England, which are provided for by selling bills here drawn on the Indian Treasuries. These Council drafts, which amount to £16,000,000 a year, more or less, are paid on the other side in rupees, and are bought here by merchants who have to make payments in India, and who would otherwise have to ship silver. Consequently, they provide a competing remittance with silver and intercept its outflow, so that, other things being equal, the larger the quantity offered for sale the lower the price of silver, and the lower the Indian exchange, the effect being much the same as though the Indian Government put bullion up for sale here.

Its price, at the present time, depends chiefly on the course of events in the United States.

Next to India the principal silver exchanges are those of China and Mexico, and these two are brought into connection by the curious fact that the piastre coined by the latter, the well-known Mexican Dollar, is also the chief medium of payment in the former. China possesses no national silver coin, but deals in the metal by weight, the unit being the Tael of 580 grains

Troy. In the provinces bordering on the sea the mercantile classes have for a long series of years made use in their commercial transactions of the silver pieces coined by foreign countries, and as experience convinced them that the purity of the Mexican dollar could always be relied upon, it gradually came to be preferred to any other, and has long been the current money. Local custom and prejudice now render it almost impossible for any other silver coin to obtain a footing in the country.

Mexican Dollars are quoted in London at so many pence per ounce, side by side with standard silver. Being about nine-tenths fine (against $\frac{444}{480}$) they are worth intrinsically about one-fortieth less than the price of standard silver, (*e.g.* if silver stands at $40\frac{1}{8}d.$ per ounce, Mexican Dollars should be $39\frac{1}{8}d.$, and so on,) but they are sometimes in such demand as to sell considerably better. The coin itself is worth, roughly speaking, $\frac{17}{20}$ of an ounce of standard silver.

XXV

THE PAPER EXCHANGES

Paper money is in almost universal use.—Even if inconvertible, can be kept from depreciation if proper precautions are taken.—Cannot be exported.—Gold is dealt in like ordinary merchandise, and always stands at a premium.—The essential conditions of a sound system of paper-currency are elasticity and self-adjustment.—Inconvertible paper fulfils neither condition.—An over-issue may be accidental ;—But is usually wilful.—Inflation and its result,—A recent instance.

THE monetary unit of Russia is also a silver coin ; but this country, as well as Spain, Italy, Greece, and Turkey, which have the double standard, and Portugal, which has the single gold standard, is under the *régime* of depreciated paper-money.

Paper money, as a convenient and economical substitute for metal, finds favour in every part of the world to a greater or less extent, its use (not abuse) being at once a result and a test of the progress of civilisation ; and wherever it exists in such denominations as are adapted to the requirements of the people—wherever, that is to say, the unit does not exceed the amount that the average wage-earner can afford to

carry about in his pocket—experience shows that it is generally preferred to coin.

That a note which may at any time be exchanged into cash at the will of the holder can never be of less value than the cash itself is perfectly plain; but that a note which is not exchangeable into cash, and of which the promise to pay on demand is only an empty form, should also be capable of being kept at par is not so obvious. It is quite possible, however, if proper precautions be taken: for so long as a country can manage to pay in produce for what it buys and borrows, without having to export hard cash; so long as the issue is proportionate to wealth, trade, and population, without being redundant; and so long as the issuing government is believed to be acting in good faith and keeping up a reasonable reserve of gold—there is no reason why an inconvertible note should not possess the same purchasing power and pass as freely from hand to hand at home as coin would. But it is of no use abroad. The foreigner has to be paid in a medium that he can use in his own country; and, consequently, if there should be an unfavourable balance of indebtedness, which has to be remitted in cash, the specie for that purpose will have to be purchased in the market, inasmuch as it cannot be obtained by encashing the note. Gold, under these circumstances, is dealt in like ordinary merchandise, and as those who make it their business to buy and sell the precious metals expect to earn the ordinary rate of profit on their capital, it

stands at a constant premium. There is no great harm in that, however, and while hardly any one feels so small a loss, the government may benefit greatly by the issue.

The curse of inconvertible paper is over-issue.

It is essential to a sound system of paper currency that it be elastic and self-regulating. It must automatically increase and decrease with the amount of work it has to perform. Cheques and bills form the principal currency of this country; and on reference to the Clearing House returns it will be seen that, at those seasons and on those particular days when business is brisk, the quantity in circulation rises, and, when business is dull, falls. They multiply exactly in the ratio that transactions multiply. A cheque is created to do certain work, and, as soon as the work is done, it dies. So it is with convertible notes. Every quarter-day sees an increase in the circulation of the Bank of England, because many payments are then effected by note; but immediately the notes have performed their task they drift back into the banks, the banks pay them in to their credit at the Bank of England, and they are cancelled.

But a currency of inconvertible paper is not automatic. It possesses no elasticity—no power of self-adjustment—whatsoever. Once issued it never returns to the issuer, nor ever dies, and every increase of its volume is an increase for good and all. Let a government, then, issue up to what the country can readily

absorb (that is to say, up to the average total of coin and *convertible* paper that it could keep in circulation), and it matters little whether the note be convertible or not; but let it once overstep the saturation-point, and the whole mass begins to depreciate.¹

Over-issue may not necessarily be intentional; it may sometimes be accidental. In countries where the system of payment by cheque is unknown, the amount of currency required for use varies according to the state of trade, and the wisest of Finance Ministers is liable to be misled by an unwonted expansion; for whenever business is good there is sure to be an urgent demand for "more currency," and it is natural to argue that the growing prosperity of the country ought not to be held in check for the want of instruments of exchange. If he accedes, and increases the issue, the consequence will be that, when trade contracts again, the currency will be redundant, because, instead of also contracting, as it ought, it remains stationary.

In too many cases, however, the over-issue is wilful.

¹ Depreciation, it may be well to explain, does not mean that people run about offering to sell a dollar-note at half-price, or that they reckon it at only so many cents in buying and selling. The paper dollar, whatever it may actually be worth, is always called a dollar; and when we say that it has depreciated we mean that its purchasing power has fallen as compared with that of gold, or, in other words, that prices expressed in paper have all risen. To measure the extent of the depreciation observe the market price of gold; thus, if 100 gold dollars cost 200 paper dollars, gold reckoned in paper is at 100% premium, and paper reckoned in gold is at 50% discount.

It is obvious that if a government, after having declared that the notes already in circulation should henceforth be inconvertible, insisted on paying out no more for supplies and salaries, &c., than came in from the taxes, depreciation would hardly be possible; but, on the contrary, it always begins sooner or later to pay out infinitely more than comes in. Inconvertible paper is simply a *forced internal loan*; and there is something so fascinating in the idea of borrowing money without having to pay interest for it, and without having to repay the principal until it is quite convenient, as to prove absolutely irresistible. More money would provide the army with new guns, the navy with new ships, the president with a new palace, the deputies with higher salaries; it would give a fillip to trade, create plenty of work, and check disaffection. As more money can be had by simply turning a handle, the temptation at last becomes too great; ministers swallow their scruples, the printing-press is set going, new notes pour out in a daily-increasing flood, and the government expenditure goes up by leaps and bounds.

Or sometimes the issue is managed by a State Bank, which is empowered to create notes up to, say, three times the amount of the specie held. For every dollar's-worth of gold that it imports from London it can make three dollars in paper. Therefore, by simple rule of three, if it can employ the three fictitious dollars at 10 per cent., it will earn 30 per cent. on its one real dollar. There is thus a powerful inducement to lend,

and speculators are not slow to take advantage of the opportunity offered them. Money is borrowed for all sorts of purposes, and on all sorts of security; and a period of inflation sets in. Land, houses, stocks, produce—all things, in fact, that look cheap—are bought for the rise; and prices—paper-prices—go up hand over hand. Gold being simply an article of merchandise, the paper price of gold goes up too, and with it the *price of bills on London*, which are payable in gold.

At first, people are too busily engaged in buying to sell again, to trouble much about the gold-premium, but the question soon forces itself upon their attention. A month ago it stood, say, at 70; yesterday at 95; to-day it is over 100, and very firm. Almost imperceptibly a vague sense of impending danger begins to overspread the market, and rapidly develops into that stand-from-under feeling which foreshadows a crisis. The scales fall from people's eyes. They now perceive that values have not really been rising, as they imagined, but that paper has been falling. Then the bubble bursts; and inflation is at an end.

But the mischief is not at an end. The vast over-issue, the entire mass of which is depreciated, can only be remedied by the wholesale cancellation of notes, and this it may take years of stringent economy to effect. It is well then for the country if the worst is known, and if the statutory gold-reserve has been preserved intact; but that such is not always the case

is shown by the following extract from a *Times* telegram, dated 11th November, 1891:

“The original amount of State paper in Brazil was 180,000 contos of reis, which stood at par, that is to say, the milreis was worth 27*d*. At present the milreis is only worth 13*d*., which means for the country a loss of more than 50 %. By the law the bank had to have one-third of the value of its notes in gold deposits, but that gold was carried away from the bank by Minister Barbosa. This fact, though denied at the time, has been publicly declared to be true by the present Minister of Finance, Baron Lucena, before the Committee of the Chamber of Deputies. He not only confirmed the fact of the withdrawal of the gold from the bank, but stated that the Government possessed only 27,000 contos as a guarantee of a paper issue of 520,000 contos.”

XXVI

THE PAPER EXCHANGES (*continued*)

The ordinary theory of fluctuations appears to need modification in the case of paper-exchanges.—The simplest plan is to regard every rise or fall as due to a change in the demand and supply of the national currency.—What governs the value of the paper-unit.—Depreciation has no limit.—The effect of depreciation on trade.—The evil consists not in the extent of the depreciation, but in the violence of the fluctuations.—The classes that suffer most from it.—An unfavourable exchange tends to work its own cure.

WHEN once the depreciation of an inconvertible paper currency becomes an accomplished fact, some of the fundamental propositions on which the theory of the exchanges is built up will appear to call for reconsideration. How, for instance, are we now to reconcile our conception of a par of exchange, or of a standard of value, with the new state of affairs; and if we are at fault in our elementary definitions, what becomes of the superstructure which we have based upon them? True, there is still the nominal metallic par to refer to; but, except that it serves as a sort of standard by which to measure the extent of the debasement, it might for all practical purposes just as well be non-existent: and to tell the student that the specie par

with the Argentine is about 48*d.*, but that the rate fluctuates at present between 12*d.* and 13*d.*, is merely to add to his perplexity.

The best and simplest way, in fact, of approaching the study of a paper-rate is to dismiss from the mind all preconceived notions as to *pars* and *specie-points*, or as to the nature and causes of normal fluctuations, and to seek the explanation of every rise or fall in some change in the demand and supply of *the national currency*. In reality, of course, every factor that affects a gold-exchange also affects a paper-exchange; but the influence of these extrinsic agencies is so confusedly mingled with that of an increase or decrease of the note-issue, that it is impossible to disentangle them. Thus, supposing the Government enters the market as a buyer of bills on London for a million sterling to meet interest-payments, and that it pays for them with part of a fresh issue of \$20,000,000 currency: if the exchange suffers from the operation, as it is sure to do, how are we to discriminate between the effects of the two distinct causes? In other words, how is it possible to distinguish between the *real* advance in the price of London paper, owing to greater demand, and the *apparent* advance, owing to a fall in value (due to increased supply) of the medium in which the bills are paid for? Obviously, we shall see our way much clearer if we regard every fluctuation of the exchange as being the result of a readjustment in the value of the paper-unit, and as nothing more.

The value of the paper-unit, which we now fall back upon, is dependent upon the quantity that has been forced into circulation, as compared, firstly, with the demand that exists for currency, and secondly, with the amount of metallic reserve upon which it is based. If trade improves, or the harvest is large, the gold-premium and the exchange improve, because more notes are required for actual use, so that some of the dead-weight is lifted off the market: and also because the country is enabled to pay what it owes abroad in produce instead of sending gold. A new loan successfully raised abroad has the same effect, because it brings gold. On the other hand, unfavourable political or financial rumours, such as those of foreign war, internal commotion, bad harvests, commercial convulsions, &c.,—anything, in short, that points to the probability of the Government having to spend more money—send up the gold-premium, because increased expenditure means further issues to make payments at home, and probably an export of gold to make payments abroad. To put the matter in a nutshell, paper money is a promise to pay; and as it derives its value from the hope that some day the Government will be in a position to redeem the promise, whatever tends to postpone that day diminishes its value.

Depreciation, it is to be observed, always progresses far more rapidly in its later stages than it did at the beginning; for the lower the value of the note the more the government must issue to pay for supplies, and the

greater the issue the greater the fall. Nor has it any limit. Until the note descends to the value of waste paper, we can never be certain that it has touched bottom.

On the trade of the country, depreciation (and an unfavourable exchange, generally,) has much the same effect as a protective duty. It stimulates exports, but checks imports. If the exporter in Brazil sells coffee here when the exchange is at 24 pence, his bill on London for £1,000 will produce him 10,000 milreis; but if the exchange falls to 12 pence, as it did between November 1890 and November 1891, the same coffee will fetch 20,000 milreis, so that unless he is paying double wages and double rent &c.—which is out of the question—he makes enormous profit. Hence, depreciation is always highly popular with the farming and mining interests (who have little to spend on materials &c. imported from abroad, and whose chief outgoings are rent and labour), and they hail every fresh decline in the value of the currency as so much more money in their pocket. As to the importer, he has to raise his prices as fast as the exchange falls, because the lower the value of the note the more he must pay for his remittance on London. So great, indeed, is the risk of loss in the import-trade, that many merchants suspend operations in this branch altogether, for fear of being ruined. They are afraid to buy on credit from England, because it is impossible to know how many dollars they may have to pay for a pound when the time comes for payment: and they are afraid

to sell on credit at home, because it is impossible to know what the dollar may be worth by the time their customers settle up with them. The evil, it is seen, consists not in the extent of the depreciation, but in the fluctuations of the exchange, and the oscillations to and fro in the value of property. Whether the exchange be high or low makes no matter, provided it will only keep so; but when that which ought to be the firm base of commercial transactions is tottering and unsteady, neither debtor nor creditor can feel sure as to the value of the payment which will ultimately pass between them, and trade becomes a mere gamble.

The chief sufferers by depreciation are, firstly, those who sold on long credit or granted long loans before the currency began to fall in value, or during the course of its fall, and secondly, the hewers of wood and drawers of water of the nation, who have to pay greatly enhanced prices for many of the necessities of life, while their wages are little, if at all, higher. The misery thus engendered among the peasantry and the minor salaried officials is a constant source of danger to the government, and not infrequently ends in revolution.

The last point to be noticed is that an unfavourable exchange tends to work its own cure: for under its influence the country naturally buys less and sells more, which is precisely what is needed to place its finances on a sounder footing. Strange as it may seem, a recovery in value of the currency appears to occasion more distress than attended the depreciation. While

inflation was in progress, prices rose and all debtors were relieved of part of their obligations; but appreciation adds to the burden of the debtor, and also imposes the formidable consequence of successive depreciations of all property arising from progressively falling prices.

XXVII

THE PAPER EXCHANGES (*continued*)

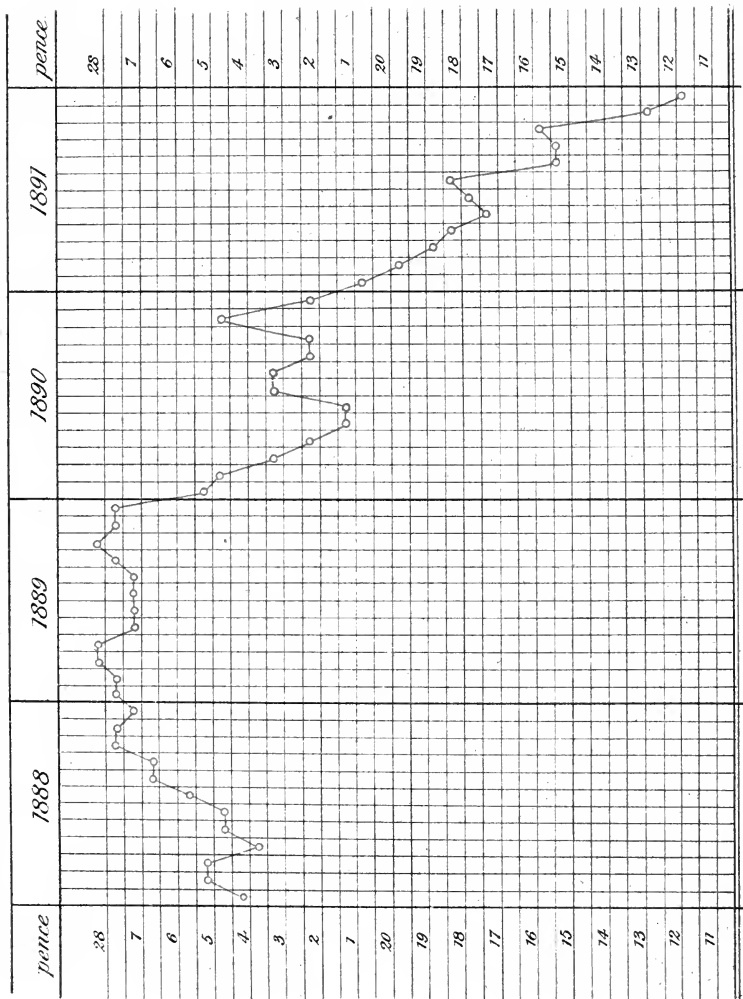
Course of the Brazilian exchange from 1888 to 1891.—Why it fell after the Revolution.—The Italian exchange.—Causes of the rise.—The Spanish rate.—The Russian rate.—Value of the silver rouble.—Effect of the Crimean and Russo-Turkish Wars on the value of the paper-rouble.

IN order to exemplify the instability of paper-exchanges, and the violence with which they are capable of fluctuating, the recent movements of some of the principal rates are shown in the adjoined diagrams.

The first exhibits the Rio quotation on London for the four years 1888-1891. The Emperor was dethroned on 15th November 1889, and for several months preceding that event there was presented the remarkable phenomenon of an exchange above par (par is 27*d.* per milreis): that is to say, Brazilian credit stood so high that the paper milreis actually sold for more than the intrinsic value of the coin that it represents, and on more than one occasion the rate even attained specie-point. Immediately after the Revolution, however, the aspect changed. On the ground that the amount of money in

1888 - 1891

5. The course of the exchange in Rio de Janeiro for three-months bills on London.







[illegible]

circulation did not appear to be sufficient for the requirements of trade, several new banks were created with power to flood the country with practically inconvertible notes, and Brazil entered with zest on a veritable "Rake's Progress:" the stimulus given by inflation to the spirit of speculation and gambling being so great that, in a single fortnight, companies were brought out in Rio, the nominal capital of which amounted to upwards of £88,000,000. As many of the new undertakings had to buy their machinery and plant in Europe before they could commence operations, and as others, which had been formed to acquire going concerns, had to pay out the proprietors on this side, enormous sums of money were sent out of the country, and the demand for remittances so far exceeded supply that the exchange fell heavily and almost continuously. The outflowing stream was also swollen by removals of capital on the part of cautious people, who, fearing that the new Republic was following the downward course of its Argentine neighbour, hastened to realise and withdraw their wealth before it was too late.

This is an ordinary example of depreciation following on over-issue, inflation, and financial mismanagement. The noticeable improvement in the middle of the year is due to the bills drawn on us against the coffee crop, which comes to market in June and July.

In Italy, where there has also been depreciation during 1891—though only on the most trivial scale as compared with Brazil—we find the same currency-sys-

tem nominally as in France, and the par of exchange with England is 25.22; but the gold-basis was never firmly established, and now exists only in name. Gold is bought and sold at a premium, and the country is under the "corso forzoso" of a paper money, which is legal tender for all internal obligations. This money is the issue of six banks, which are supposed to keep a metallic reserve of one-third. The rise in exchange during the year, which shows a growing distrust of the note, appears to have been due to three chief causes:—

1. The annual deficit in the national accounts, which is the price Italy has to pay for her elevation to the rank and dignity of a Great Power. Since joining the Triple Alliance she has been spending a great deal more than she can afford on her army and navy, and finds it increasingly difficult to make both ends meet.

2. The banks which are responsible for the note-issue are said to have exceeded the legal ratio; and

3. The securities held by them against two-thirds of the issue are believed to be in some cases almost worthless.

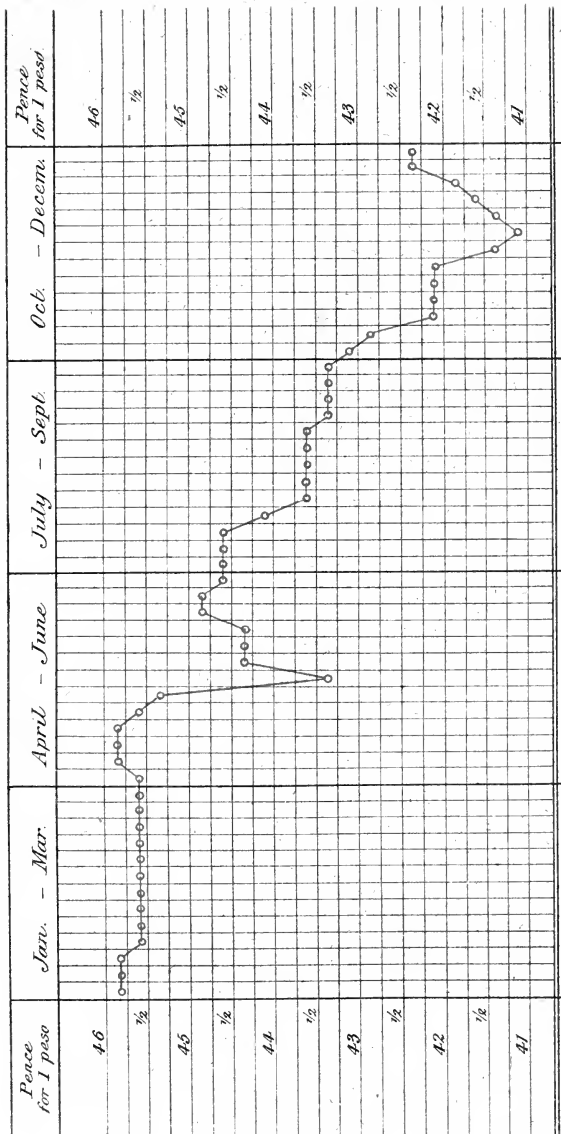
To these reasons must be added the fact that a crisis broke out in Leghorn at the end of March, and that several banking houses had to close their doors.

Italy is now pledged to severe economy; but the pledge has often been made before and as often broken.

Turning to Spain, we find the position similar in nature, but far worse in degree. The same continual

1891

7. *The course of the exchange in London for three-months bills on Spain*

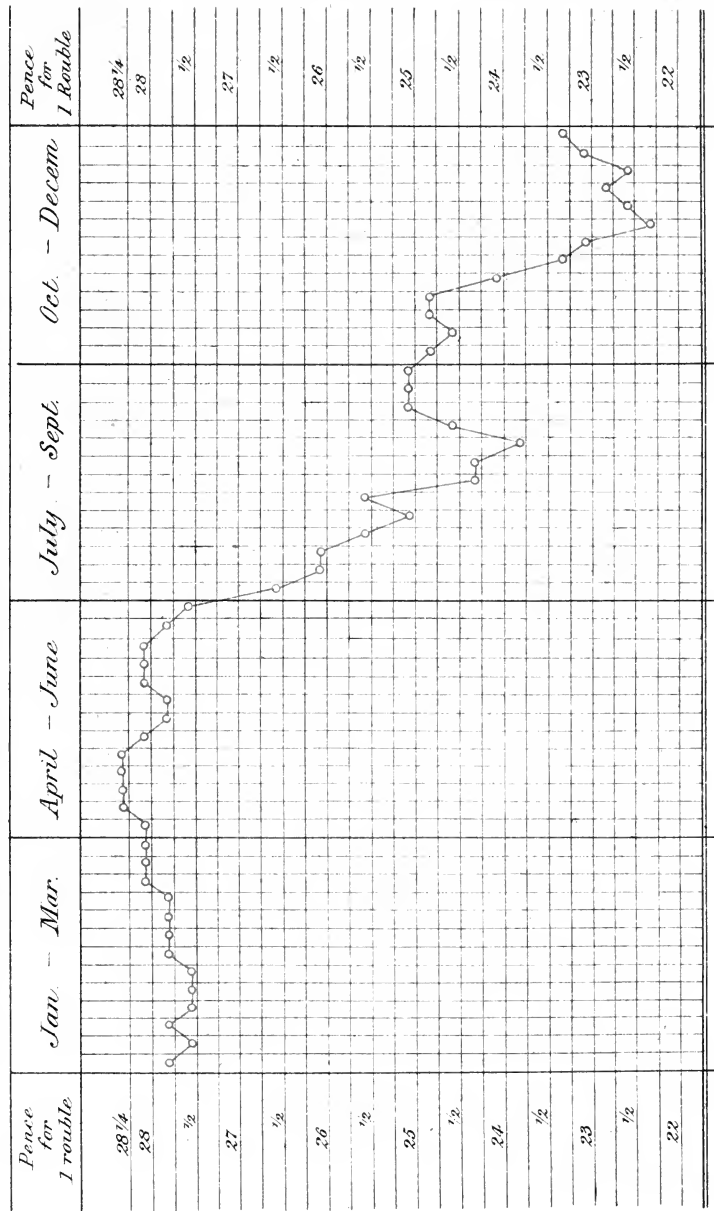






1891

8. *The course of the exchange in London for three-months bills on St. Petersburg.*



failure to establish financial equilibrium is present, and the same propensity to overstep the three-to-one ratio in the issue of paper money. The nominal par is about 47.58 pence, according to our way of quoting the exchange, and, according to theirs, 25.22 pesetas per £. In May the sudden fall was a reflection of the crisis in Portugal, while the steady decline in the autumn was due to the difficulty experienced by the Bank of Spain in keeping its circulation within the legal limits.

Lastly, we glance at Russia. As already mentioned, the monetary unit in this case is a silver coin—the rouble—but the actual currency consists of inconvertible paper, so that we have here to deal with fluctuations arising not only from over-issue, but also from the instability of the metallic basis. The coined rouble should contain $277\frac{3}{4}$ grains fine silver, making its value almost exactly five-eighths of the price per ounce of standard silver in London.

For some years prior to 1854 the convertibility of the note was strictly maintained by a proper reserve of specie, and it stood at about 38*d.*; but the Crimean War, the expenditure of which was largely met by fresh issues, which were declared inconvertible, brought it down to about 30*d.*, and the Russo-Turkish war reduced its value still further to an average of about 24*d.* The notes are denominated “credit bills,” and the issue appears to increase or diminish without official notification.

The heavy fall in the autumn of 1891 was occasioned

by the partial failure of the crops and the consequent prohibition of grain exports, which Russia largely depends upon to pay her debts with. The ukase forbidding the export of rye was promulgated in August and that forbidding the export of wheat towards the end of November: and in each instance the exchange at once relapsed.



THE END



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